

# VENTURA COLLEGE ADMIN BLDG ALTERATION

VENTURA COLLEGE, 4667 TELEGRAPH RD, VENTURA, CA 93003



rrmdesign.com | (805) 543-1794

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## PROJECT SCOPE

REMODEL PORTION OF AN EXISTING ADMINISTRATION BUILDING ON A COMMUNITY COLLEGE CAMPUS. WORK INCLUDES DEMOLITION OF NON-STRUCTURAL CEILINGS AND WALL FRAMING, NEW WALL FRAMING, NEW SUSPENDED CEILINGS, NEW WINDOWS IN A PORTION OF THE BUILDING, NEW POWER AND LIGHTING, NEW SPLIT HEAT PUMP HVAC SYSTEM AND NEW FINISHES.

## PROJECT DIRECTORY

**OWNER**  
VENTURA COUNTY COMMUNITY COLLEGE DISTRICT  
ADDRESS: 761 E. DAILY DR.  
CAMARILLO, CA 93010  
CONTACT: BISHOY ELMAGARISY, ASST FACIL DIR  
EMAIL: BELMAGARISY@VCCCD.EDU  
P: 805-289-6235

**ARCHITECT**  
RRM DESIGN GROUP  
ADDRESS: 422 E. MAIN ST.  
VENTURA, CA 93001  
CONTACT: MARTIN HARTMANN  
EMAIL: MHARTMANN@RRMDISIGN.COM  
P: 805-597-5292

**MECHANICAL ENGINEER**  
AE GROUP MECHANICAL ENGINEERS, INC.  
ADDRESS: 838 E. FRONT ST.  
VENTURA, CA 93001  
CONTACT: RAVISH RAO  
EMAIL: RAVISH@AENGINC.COM  
P: 805-653-1722

**ELECTRICAL ENGINEER**  
THOMA ELECTRIC  
ADDRESS: 3562 EMPLEO ST, SUITE C  
SAN LUIS OBISPO, CA 93401  
CONTACT: JEFF THOMA  
EMAIL: JTHOMA@THOMAELEC.COM  
P: (805) 543-3850

## PROJECT INFORMATION

**SITE INFORMATION:**  
STREET ADDRESS: 4667 TELEGRAPH RD, VENTURA, 93003  
LAND USE: COMMUNITY COLLEGE  
EXISTING USE: BUSINESS  
PROPOSED USE: NO CHANGE IN USE

**BUILDING INFORMATION:**  
NUMBER OF STORIES: 1  
OCCUPANCY GROUP: B  
CONSTRUCTION TYPE: V  
SPRINKLERED: NO  
MAX. HEIGHT ALLOWED (PER 2022 CBC TABLE 604.3): 55'  
MAX. HEIGHT PROPOSED: NO CHANGE  
ROOF RATING: CLASS A  
HIGH WIND ZONE: NO  
GROSS AREA: 8580 SF (NO CHANGE)  
PROJECT AREA: 1400 SF

## DEFERRED SUBMITTALS

1. NONE

## BID ALTERNATES

1. NONE

## SPECIAL INSTRUCTIONS

1. NONE

## ACCEPTANCE TESTING

- THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.
- LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).
- MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.
- ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER/ARCHITECT OF RECORD OR THE OWNER'S AGENT.
- A LISTING OF CERTIFIED ATT CAN BE FOUND AT: <https://www.energy.ca.gov/programs-and-topics/programs/acceptance-test-technician-certification-provider-program/acceptance>
- ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.
- PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

## SHEET INDEX

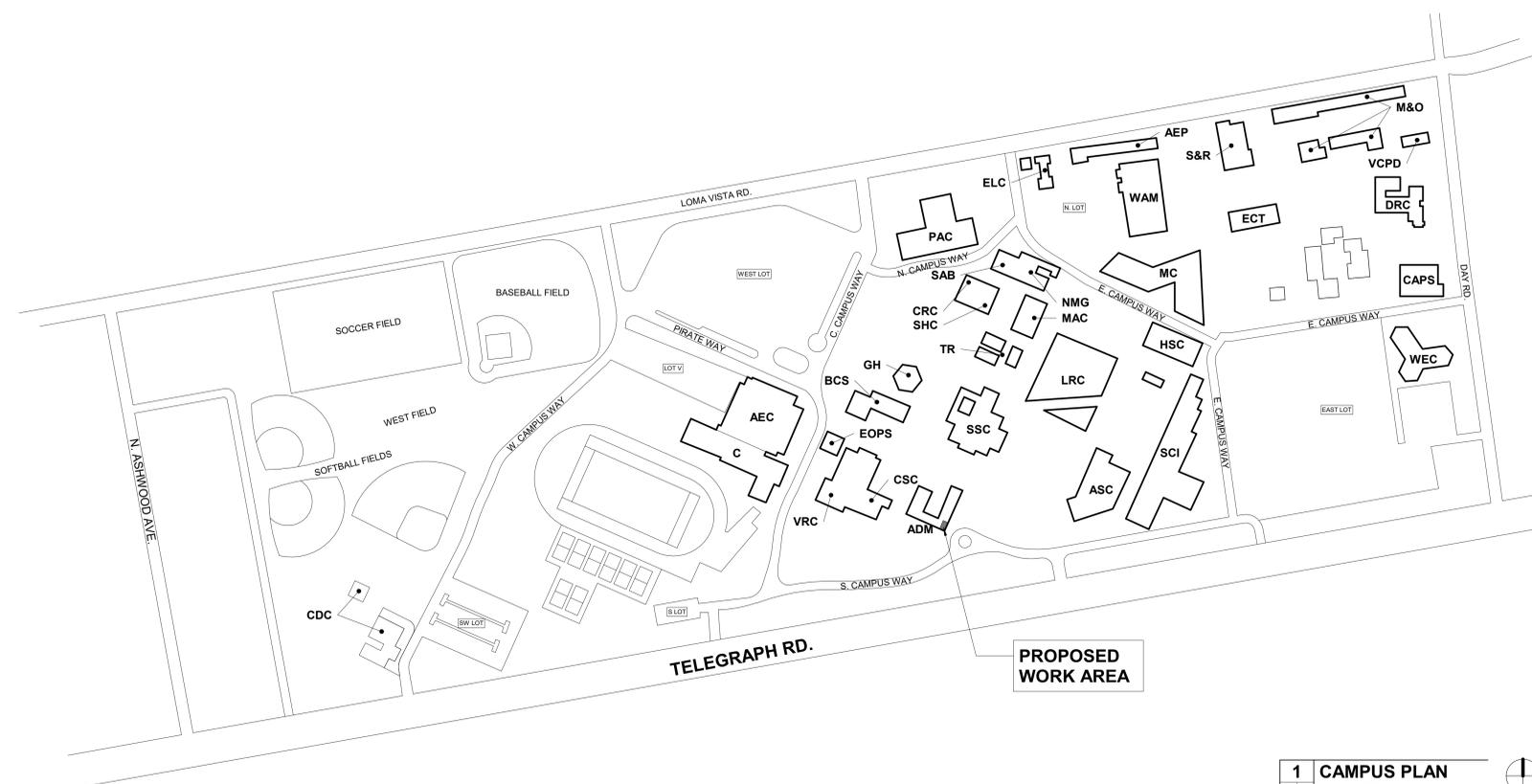
**GENERAL**  
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G-002 SYMBOLS AND ABBREVIATIONS  
G-011 GENERAL NOTES  
G-012 GENERAL NOTES

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E-501 INTERIOR TITLE 24 COMPLIANCE DOCUMENTATION  
E-502 POWER DISTRIBUTION TITLE 24 COMPLIANCE DOCUMENTATION



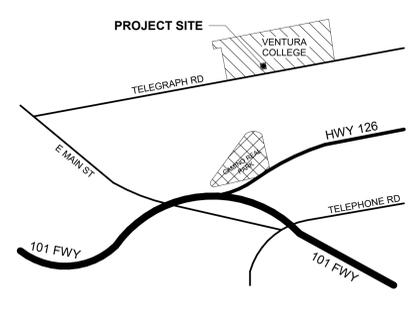
## PROJECT GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE 2022 EDITION TITLE 24 CALIFORNIA CODE OF REGULATIONS (C.C.R.).
- THE DRAWINGS AND SPECIFICATIONS AND ALL COPIES THEREOF, OR LEGAL INSTRUMENTS OF SERVICE FOR THE USE OF THE OWNER AND AUTHORIZED REPRESENTATIVE OF THE DESIGNATED PROPERTY ONLY, OTHER USE, WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE ARCHITECT IS PROHIBITED.
- SPECIFICATIONS, DETAILS AND SCHEDULES WHICH MAY BE BOUND SEPARATELY, ARE PART OF THESE CONTRACT DOCUMENTS. DRAWINGS BY SEPARATELY CONTRACTED CONSULTING PROFESSIONALS SUCH AS STRUCTURAL, INTERIORS OR LANDSCAPE ARE SUPPLEMENTARY TO THE DESIGN DRAWINGS AND ARE PART OF THESE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY IF INFORMATION IS NOT SHOWN OR IS UNCLEAR. REPORT APPARENT DISCREPANCIES ON DRAWINGS AND/OR SPECIFICATIONS TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVAL FOR ALL WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATING THE WORK FOR ALL UTILITIES AND SERVICES.
- ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. QUESTIONS REGARDING THE SAME, OR THEIR EXACT MEANING, SHALL BE DIRECTED TO THE ARCHITECT.
- CODE REQUIREMENTS: ALL WORK TO COMPLY WITH DIVISION OF THE STATE ARCHITECT REGULATIONS AND CURRENT EDITION OF TITLE 24 CODE OF REGULATIONS.
- CONSTRUCTION IS TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF CALIFORNIA ADMINISTRATIVE CODE, TITLE 24.
- EXISTING CONDITIONS: CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS DESIGNATED AS, OR REQUIRED TO, INTERFACE WITH NEW CONSTRUCTION. REPORT ANY DISCREPANCIES, DEFICIENCIES, OR CONDITIONS INCOMPATIBLE WITH PROPOSED CONSTRUCTION PRIOR TO PROCEEDING.
- IT IS THE RESPONSIBILITY OF THE G.C. TO INSTALL ALL TEMPORARY BRACING AND SHORING TO ENSURE THE SAFETY OF THE WORK UNTIL IT IS IN ITS COMPLETED FORM. DO NOT REMOVE EXISTING STRUCTURAL SUPPORTS OR BEARING WALLS WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT OR STRUCTURAL ENGINEER.
- DIMENSIONS: NOTES ON SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CONDITIONS IN FIELD, AND IMMEDIATELY REPORT ANY DISCREPANCIES OR EXISTING AND PROPOSED VARIATIONS TO THE ARCHITECT. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND COORDINATING DIMENSIONS. ALL WRITTEN DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS, AND DETAILS. SPECIFIC NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER ANY GENERAL NOTES OR DETAILS. CONDITIONS NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED AS SIMILAR CONDITIONS DETAILED AND/OR INDICATED ON THE DRAWINGS. ANY WORK INSTALLED IN CONFLICT WITH THE DESIGN DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE.
- ALL EXTERIOR DIMENSIONS ARE TO ASSURE FACE OF PLYWOOD SHEATHING OR FACE OF MASONRY UNO. INTERIOR DIMENSIONS ARE TO FACE OF GYPSUM BOARD FINISH OR CENTERLINE OF WALL UNO.
- MECHANICAL REPORTS ARE NOT INCLUDED IN THE CONTRACT DOCUMENTS, BUT MAY BE MADE AVAILABLE TO THE CONTRACTOR FOR INFORMATION ONLY. THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR ANY CONCLUSIONS THE CONTRACTOR MAY DRAW FROM SUCH INFORMATION. THE CONTRACTOR SHALL INVESTIGATE AND DETERMINE EXISTING SOILS AND SITE CONDITIONS UNDER WHICH CONTRACTOR WILL OPERATE IN PERFORMING THE WORK.
- THE CONTRACTOR IS TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF DEMOLITION AND CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS ON THE JOB SITE. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR SHALL RESTRICT GENERAL PUBLIC ACCESS TO THE DEMOLITION, CONSTRUCTION, AND STORAGE AREAS.
- HAZARDOUS MATERIALS ARE NOT TO BE STORED IN THE BUILDING, NOR USED IN CONSTRUCTION, IN QUANTITIES EXCEEDING THOSE SPECIFIED IN THE CBC.
- DURING DEMOLITION AND CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXISTENCE AND PRECISE LOCATION OF UNDERGROUND PIPING AND OTHER STRUCTURES WHICH MAY BE AFFECTED BY CONSTRUCTION. PROMPTLY NOTIFY EACH UTILITY COMPANY, MUNICIPALITY, OR OTHER AGENCY OWNING OR OPERATING ANY AFFECTED FACILITIES OR STRUCTURES, AND REQUEST ENGINEERING INFORMATION AND MARKING OF FACILITIES IN FIELD, PRIOR TO COMMENCING ANY WORK ON THE SITE. REMOVE ALL ITEMS SPECIFIED TO BE ABANDONED, AND TAKE CARE TO PREVENT ANY DAMAGE TO, OR DISRUPTION OF, ITEMS TO REMAIN.
- WHERE FIRE-RATED WALL OR CEILING ASSEMBLIES ARE PENETRATED BY RECESSED FIXTURES, MECHANICAL DUCTS, OR OTHER ITEMS, THE FIXTURES, DUCTS, OR OTHER ITEMS SHALL BE FIRE-RATED TO MATCH THE WALL OR CEILING ASSEMBLY.
- UNO ALL EXTERIOR DOORS SHALL LIMIT AIR INFILTRATION WHEN IN CLOSED POSITION AS FOLLOWS: PROVIDE WEATHERSTRIPPING AT HEAD, SILL AND JAMBS. INSTALL ASTRAHAL AT MEETING PORTION OF DOUBLE DOORS. DOORS REQUIRING VERTICAL TRACKS OR GUIDES SHALL USE CONTINUOUS MOUNTING ANGLE, AND SHALL BE SEALED TO LIMIT AIR LEAKAGE.
- CONTRACTOR SHALL PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BLOCKING, BACKING, HANGERS, BACK-UP PLATES, AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK, TOILET ROOM ACCESSORIES, FIXTURES, PARTITIONS, AND ALL WALL MOUNTED OR SUSPENDED MECHANICAL, KITCHEN, ELECTRICAL OR MISCELLANEOUS EQUIPMENT AND FURNISHING.
- CONTRACTOR SHALL VERIFY EXACT SIZES AND LOCATIONS OF ALL MECHANICAL EQUIPMENT PADS, BASE STRUCTURES, ROOF OPENINGS, AS WELL AS POWER, WATER, DRAIN INSTALLATIONS AND STRUCTURAL STEEL SUPPORT LOCATIONS, WHEN APPLICABLE, WITH EQUIPMENT MANUFACTURERS BEFORE PROCEEDING WITH THE WORK. CHANGES TO ACCOMMODATE FIELD CONDITIONS OR APPROVED SUBSTITUTIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.
- ALL PIPES, CONDUIT, WIRES, AND DUCTS SHALL BE CONCEALED FROM VIEW UNO, WHERE THESE ARE EXPOSED, THEY SHALL BE PAINTED TO MATCH THE BACKGROUND SURFACE.
- ALL GLAZING INSTALLED IN HAZARDOUS LOCATIONS, AS DEFINED BY CBC CHAPTER 24, SHALL BE TEMPERED GLASS. SKYLIGHTS ARE TO BE TEMPERED GLASS OR FIBERGLASS AS SPECIFIED.
- INSTALL SEALANT AT JOINTS AROUND WINDOW AND DOOR FRAMES, BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF, BETWEEN WALL PANELS, AND AT PENETRATIONS OF UTILITIES THROUGH THE BUILDING ENVELOPE, TO LIMIT AIR INFILTRATION.
- THE CONTRACTOR SHALL PROVIDE THE OWNER A LIST OF THE FEATURES, MATERIALS, COMPONENTS, AND MECHANICAL DEVICES INSTALLED IN THE BUILDING, AND INSTRUCTIONS ON HOW TO USE THEM EFFICIENTLY. THE INSTRUCTIONS SHALL BE CONSISTENT WITH SPECIFICATIONS SET FORTH BY THE EXECUTIVE DIRECTOR OF THE STATE ENERGY COMMISSION. THE ENERGY "CERTIFICATION OF COMPLIANCE" SHALL BE SUBMITTED AFTER THE INSTALLATION OF THE REQUIRED EQUIPMENT AND/OR MATERIAL, AND PRIOR TO ANY REQUEST FOR A FINAL INSPECTION.
- ITEMS IN THESE DRAWINGS NOT SPECIFICALLY IDENTIFIED AS EXISTING ARE ASSUMED TO BE NEW.
- ALL ASTM AND/OR ANSI DESIGNATIONS REFERRED TO ON THESE DRAWINGS SHALL BE THE LATEST ADOPTED OR REVISED SPECIFICATIONS. MATERIAL AND EQUIPMENT NECESSARY FOR WORK SHALL NOT BE PLACED OR STORED ON PUBLIC PROPERTY SO AS TO OBSTRUCT A FREE AND CONVENIENT APPROACH TO AND USE OF ANY FIRE HYDRANT, FIRE OR POLICE ALARM BOX, UTILITY BOX, CATCH BASIN OR MANHOLE OR SO AS TO INTERFERE WITH THE FREE FLOW OF WATER IN STREET OR ALLEY GUTTER. PROTECTION AGAINST DAMAGE SHALL BE PROVIDED TO SUCH UTILITY FIXTURES DURING THE PROGRESS OF THE WORK, BUT SIGHT OF THEM SHALL NOT BE OBSTRUCTED.
- WHERE NOT SPECIFICALLY DESCRIBED IN ANY OF THE NOTES OR SPECIFICATIONS, WORKMANSHIP SHALL CONFORM TO THE METHODS AND OPERATIONS OF BEST STANDARDS AND ACCEPTED PRACTICES OF THE RESPECTIVE TRADE.
- CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED AND PLACED SO AS NOT TO ENDANGER THE PUBLIC, THE WORKERS OR ADJOINING PROPERTY FOR THE DURATION OF THE CONSTRUCTION PROJECT.

## APPLICABLE CODES

- PARTIAL LIST OF APPLICABLE CODES AND STANDARDS AS OF JANUARY 1, 2023**
- 2022 CALIFORNIA BUILDING STANDARDS CODE (CAL. CODE REGS., TITLE 24)
  - PART 1 - CALIFORNIA ADMINISTRATIVE CODE (CAC)
  - PART 2 - CALIFORNIA BUILDING CODE, VOLUMES 1 AND 2 (CBC)
  - PART 3 - CALIFORNIA ELECTRICAL CODE (CEC)
  - PART 4 - CALIFORNIA MECHANICAL CODE (CMC)
  - PART 5 - CALIFORNIA PLUMBING CODE (CPC)
  - PART 6 - CALIFORNIA ENERGY CODE (CEC)
  - PART 7 - VACANT
  - PART 8 - CALIFORNIA HISTORICAL BUILDING CODE (CHBC)
  - PART 9 - CALIFORNIA FIRE CODE (CFC)
  - PART 10 - CALIFORNIA EXISTING BUILDING CODE (CEBC)
  - PART 11 - CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)
  - PART 12 - CALIFORNIA REFERENCED STANDARDS CODE
- CALIFORNIA CODE OF REGULATIONS TITLE 19, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
- NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS:
    - NFPA 10-21 STANDARD FOR PORTABLE FIRE EXTINGUISHERS
    - NFPA 13-22 STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS
    - NFPA 14-19 STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEM
    - NFPA 24-19 INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES
    - NFPA 25-130CA INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS
    - NATIONAL FUEL GAS CODE
    - NFPA 54-18 NATIONAL FIRE ALARM AND SIGNALING CODE
    - NFPA 72-22 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES
    - NFPA 101-21 LIFE SAFETY CODE
    - NFPA 105-19 STANDARD FOR SMOKE DOOR ASSEMBLIES AND OTHER OPENING PROTECTIVES
    - NFPA 111-19 STANDARD ON STORED ELECTRICAL ENERGY EMERGENCY AND STANDBY POWER SYSTEMS
    - NFPA 170-18 STANDARD FOR FIRE SAFETY AND EMERGENCY SYMBOLS
    - NFPA 221-18 STANDARD FOR HIGH CHALLENGE FIRE WALLS, FIRE WALLS, AND FIRE BARRIER WALLS
    - NFPA 241 STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATIONS, AND DEMOLITION OPERATIONS
    - NFPA 252-17 STANDARD METHODS OF FIRE TESTS DOOR ASSEMBLIES
    - NFPA 253-19 STANDARD METHOD OF TEST FOR CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS USING A RADIANT HEAT ENERGY SOURCE
    - NFPA 257-17 STANDARD FOR FIRE TEST FOR WINDOW AND GLASS BLOCK ASSEMBLIES
- REFERENCE 2022 CBC CHAPTER 35 AND 2022 CFC CHAPTER 80 FOR NFPA STANDARDS AND CA AMENDMENTS.

## VICINITY MAP



| CAMPUS BUILDING LEGEND |  |
|------------------------|--|
| ABBREVIATION           | BUILDING NAME                                    |
| ADM                    | ADMINISTRATION                                   |
| AEC                    | ATHLETIC EVENT CENTER                            |
| AEP                    | AUTO EDUCATION PROGRAM                           |
| ASC                    | APPLIED SCIENCES CENTER                          |
| BCS                    | BOOKSTORE AND CAMPUS SERVICES                    |
| C                      | SMALL GYM  |
| CAPS                   | CAPS MEDIA                                       |
| CDC                    | CHILD DEVELOPMENT CENTER                         |
| CRC / SHC              | CREATIVE RESOURCE CENTER / STUDENT HEALTH CENTER |
| CSC / VRC              | CAMPUS STUDENT CENTER / VETERANS RESOURCE CENTER |
| DRC                    | DAY ROAD CENTER                                  |
| ELC                    | ENVIRONMENTAL CONSTRUCTION TECHNOLOGY            |
| ECT                    | ENGLISH LEARNING CENTER/TESTING CENTER           |
| EOPS                   | EXTENDED OPPORTUNITIES PROGRAMS & SERVICES       |
| GH                     | GUTHRIE HALL                                     |
| HSC                    | HEALTH SCIENCES CENTER                           |
| LRC                    | LIBRARY & LEARNING RESOURCE CENTER               |
| M&O                    | MAINTENANCE & OPERATIONS                         |
| M&G                    | MEDIA ARTS CENTER                                |
| MC                     | MULTIDISCIPLINARY CENTER                         |
| NMG / SAB              | NEW MEDIA GALLERY / STUDIO ARTS BUILDING         |
| PAC                    | PERFORMING ARTS CENTER                           |
| S&R                    | SHIPPING AND RECEIVING WAREHOUSE                 |
| SCI                    | SCIENCES AND MATHEMATICS COMPLEX                 |
| SSC                    | STUDENT SERVICES CENTER                          |
| TR                     | TRAILERS   |
| VCPD                   | VENTURA COLLEGE POLICE                           |
| W&M                    | WELDING, AUTO & MANUFACTURING                    |
| WEC                    | WRIGHT EVENT CENTER                              |

| NO. | REVISION    | DATE     |
|-----|-------------|----------|
| 1   | ADDENDUM #1 | 08/20/25 |
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|     |             |          |
|     |             |          |

PROJECT MANAGER: MH  
DRAWN BY: GK/CSS/DD/JM/SL  
CHECKED BY: DS  
DATE: 06/20/2025  
PROJECT NUMBER: 3425-01-ED24  
SHEET: G-001

100% CD  
TITLE SHEET

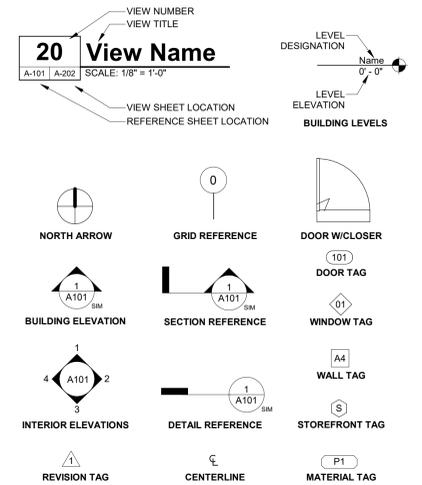
VENTURA COLLEGE ADMIN BLDG ALTERATION  
4667 TELEGRAPH RD., VENTURA, CA 93003

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**ABBREVIATIONS**

|       |                                 |        |   |        |   |
|-------|---------------------------------|--------|---|--------|---|
| A/C   | AIR CONDITIONING                | FOIC   | FURNISHED BY OWNER INSTALLED BY CONTRACTOR    | PV     | PHOTO VOLTAGE                           |
| ABV   | ABOVE                           | FOM    | FACE OF MASONRY                               | PVC    | POLYVINYL CHLORIDE                      |
| ACOUS | ACOUSTICAL                      | FOS    | FACE OF STUD                                  | PVMT   | PAVEMENT                                |
| ACT   | ACOUSTICAL CEILING TILE         | FRP    | FIBERGLASS REINFORCED PANELS                  | QTY    | QUANTITY                                |
| ADA   | AMERICANS WITH DISABILITIES ACT | FT     | FOOT OR FEET                                  | R      | RADIUS, RISER                           |
| AFCI  | ARC FAULT CIRCUIT INTERRUPTER   | FTG    | FOOTING                                       | RB     | RUBBER BASE                             |
| AFF   | ABOVE FINISH FLOOR              | GA     | GAUGE, GAGE                                   | RCP    | REFLECTED CEILING PLAN                  |
| AL    | ALUMINUM                        | GALV   | GALVANIZED                                    | RD     | ROOF DRAIN                              |
| ALT   | ALTERNATE                       | GB     | GRAB BAR                                      | REF    | REFRIGERATOR                            |
| ARCH  | ARCHITECT(URAL)                 | GC     | GENERAL CONTRACTOR                            | REINF  | REINFORCED                              |
| BD    | BOARD                           | GFCI   | GROUND FAULT CIRCUIT INTERRUPTER              | REQD   | REQUIRED                                |
| BDRM  | BEDROOM                         | GWB    | GYP SUM BOARD                                 | RH     | RIGHT HAND                              |
| BET   | BETWEEN                         | GYP    | GYP SUM                                       | RM     | ROOM                                    |
| BIT   | BITUMINOUS                      | HB     | HOSE BIBB                                     | RO     | ROUGH OPENING                           |
| BLDG  | BUILDING                        | HC     | HOLLOW CORE                                   | RTU    | ROOF TOP UNIT (MECH)                    |
| BLKG  | BLOCKING                        | HDWD   | HARDWOOD                                      | S      | SOUTH                                   |
| BLW   | BELOW                           | HDWR   | HARDWARE                                      | SAFB   | SOUND ATTENUATION FIBER BATT            |
| BM    | BEAM                            | HGT    | HEIGHT  | SAWP   | SELF ADHERING WATERPROOFING             |
| BOT   | BOTTOM                          | HM     | HOLLOW METAL                                  | SC     | SCUPPER/SOLID CORE                      |
| BUR   | BUILT UP ROOF                   | HORIZ  | HORIZONTAL                                    | SCHED  | SCHEDULE                                |
| CB    | CATCH BASIN                     | HVAC   | HEATING, VENTILATION, A/C                     | SEAL   | SEALANT                                 |
| CBC   | CALIFORNIA BUILDING CODE        | ID     | INSIDE DIAMETER                               | SECT   | SECTION                                 |
| CEM   | CEMENT                          | IC     | IMPACT INSULATION CLASS                       | SF     | SQUARE FOOT                             |
| CFM   | CUBIC FEET PER MINUTE           | IN     | INCH  | SHT    | SHEET                                   |
| CIP   | CAST IN PLACE                   | IN     | INCH  | SHTHG  | SHEATHING                               |
| CJ    | CONTROL JOINT                   | INCAND | INCANDESCENT                                  | SIM    | SIMILAR                                 |
| CL    | CENTER LINE                     | INSUL  | INSULATION, INSULATED                         | SM     | SHEET METAL                             |
| CLG   | CEILING                         | INT    | INTERIOR                                      | SPEC   | SPECIFICATION                           |
| CLO   | CLOSET                          | JC     | JANITORS CLOSET                               | SQ     | SQURE                                   |
| CLR   | CLEAR                           | JT     | JOINT   | SS     | SOLID SURFACE                           |
| CMU   | CONCRETE MASONRY UNIT           | LAM    | LAMINATE                                      | SSTL   | STAINLESS STEEL                         |
| CO    | CLEAN OUT                       | LAV    | LAVATORY                                      | STC    | SOUND TRANSMISSION CLASS                |
| COL   | COLUMN                          | LBS    | POUNDS  | STD    | STANDARD                                |
| CONC  | CONCRETE                        | LEED   | LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN | STL    | STEEL                                   |
| CONST | CONSTRUCTION                    | LF     | LINEAR FEET                                   | STOR   | STORAGE                                 |
| CONT  | CONTINUOUS                      | LIN    | LINEN CLOSET                                  | STRUCT | STRUCTURAL                              |
| CONTR | CONTRACTOR                      | LINO   | LINOLEUM                                      | SUSP   | SUSPENDED                               |
| CPT   | CARPET                          | LT(G)  | LIGHTING                                      | SV     | SHEET VINYL                             |
| CT    | CERAMIC TILE                    | LVL    | LAMINATED VENEER LUMBER                       | SYM    | SYMMETRICAL                             |
| CTR   | CENTER                          | LVT    | LUXURY VINYL TILE                             | T      | TREAD                                   |
| DBL   | DOUBLE                          | LW     | LIGHTWEIGHT                                   | T&G    | TONGUE & GROOVE                         |
| DF    | DRINKING FOUNTAIN               | MAX    | MAXIMUM                                       | TEL    | TELEPHONE                               |
| DIA   | DIAMETER, DIAPHRAGM             | MDF    | MEDIUM DENSITY FIBERBOARD                     | TEMP   | TEMPERED                                |
| DIM   | DIMENSION                       | MECH   | MECHANICAL                                    | TER    | TERRAZZO                                |
| DN    | DOWN                            | MEMB   | MEMBRANE                                      | THK    | THICK                                   |
| DR    | DOOR                            | MEP    | MECHANICAL, ELECTRICAL, PLUMBING              | THR    | THRESHOLD                               |
| DS    | DOWN SPOUT                      | MFR    | MANUFACTURER                                  | TJI    | TRUSS JOIST I-JOIST                     |
| DTL   | DETAIL                          | MIN    | MINIMUM                                       | TO     | TOP OF                                  |
| DW    | DISHWASHER                      | MISC   | MISCELLANEOUS                                 | TOS    | TOP OF SLAB                             |
| DWG   | DRAWING                         | MO     | MASONRY OPENING                               | TOW    | TOP OF WALL                             |
| (E)   | EXISTING                        | MTD    | MOUNTED                                       | TRANS  | TRANSFORMER                             |
| E     | EAST                            | MTL    | METAL   | TV     | TELEVISION                              |
| EA    | EACH                            | N      | NORTH   | TYP    | TYPICAL                                 |
| EJ    | EXPANSION JOINT                 | NIC    | NOT IN CONTRACT                               | UFAS   | UNIFORM FEDERAL ACCESSIBILITY STANDARDS |
| EL    | ELEVATION                       | NO     | NUMBER  | UG     | UNDERGROUND                             |
| ELEV  | ELEVATION                       | NOM    | NOMINAL                                       | UNFIN  | UNFINISHED                              |
| ELEC  | ELECTRIC                        | NTS    | NOT TO SCALE                                  | UNO    | UNLESS NOTED OTHERWISE                  |
| ENCL  | ENCLOSURE                       | O.P.   | OVERFLOW PIPE                                 | UV     | ULTRAVIOLET                             |
| EQ    | EQUAL                           | OC     | ON CENTER                                     | VCT    | VINYL COMPOSITION TILE                  |
| EQUIP | EQUIPMENT                       | OD     | OVERFLOW DRAIN                                | VERT   | VERTICAL                                |
| EXH   | EXHAUST                         | OFF    | OFFICE  | VIF    | VERIFY IN FIELD                         |
| EXP   | EXPANSION                       | OH     | OPPOSITE HAND                                 | VTR    | VENT TERMINATION PIPE                   |
| EXT   | EXTERIOR                        | OPG    | OPENING                                       | WVC    | VINYL WALL COVERING                     |
| FACP  | FIRE ALARM CONTROL PANEL        | OPP    | OPPOSITE                                      | W      | WEST                                    |
| FAU   | FORCED AIR UNIT                 | (P)    | PROPOSED                                      | W/     | WITH                                    |
| FAWP  | FLUID APPLIED WATERPROOFING     | PERM   | PERIMETER                                     | WID    | WASHER DRYER                            |
| FD    | FLOOR DRAIN                     | PERP   | PERPENDICULAR                                 | W/O    | WITHOUT                                 |
| FDC   | FIRE DEPARTMENT CONNECTION      | PG     | PAINT GRADE                                   | WC     | WATERCLOSET                             |
| FE    | FIRE EXTINGUISHER               | PL     | PLATE, PROPERTY LINE                          | WD     | WOOD                                    |
| FEC   | FIRE EXTINGUISHER CABINET       | PLAM   | PLASTIC LAMINATE                              | WDW    | WINDOW                                  |
| FF    | FINISHED FLOOR ELEVATION        | PLBS   | PLUMBING                                      | WH     | WATER HEATER                            |
| FG    | FINISHED GRADE                  | PLYWD  | PLYWOOD                                       | WI     | WROUGHT IRON                            |
| FLOR  | FLOURESCENT                     | PNL    | PANEL   | WIN    | WINDOW                                  |
| FHC   | FIRE HOSE CABINET               | PP     | POWER POLE                                    | WP     | WATERPROOF(ING)                         |
| FIN   | FINISH                          | PR     | PAIR  | WR     | WEATHER RESISTIVE                       |
| FIXT  | FIXTURE                         | PRTN   | PARTITION                                     | WRB    | WATER RESISTIVE BARRIER                 |
| FLR   | FLOOR                           | PSF    | POUNDS PER SQUARE FOOT                        | WSCOT  | WANSBOT                                 |
| FND   | FOUNDATION                      | PSI    | POUNDS PER SQUARE INCH                        | WT     | WEIGHT                                  |
| FO    | FACE OF                         | PSL    | PARALLEL STRAND LUMBER                        | WWF    | WELDED WIRE FABRIC                      |
| FOC   | FACE OF CONCRETE                | PT     | PRESSURE TREATED                              | YD     | YARD                                    |
| FOF   | FACE OF FINISH                  | PTD    | PAINTED                                       |        |   |

**SYMBOLS**



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**VENTURA COLLEGE ADMIN BLDG  
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**SYMBOLS AND ABBREVIATIONS**

| NO. | REVISION | DATE |
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|     |          |      |
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PROJECT MANAGER  
MHT  
DRAWN BY GK/CCS/DD/JM/SL | CHECKED BY DS  
DATE 06/20/2025  
PROJECT NUMBER 3425-01-ED24  
SHEET

**G-002**

**SAWN LUMBER**

1. FRAMING SHALL MEET THE FOLLOWING MINIMUM STANDARD EXCEPT WHERE OTHERWISE NOTED:

| SAWN LUMBER PROPERTIES         |                  |         |                                     |                   |
|--------------------------------|------------------|---------|-------------------------------------|-------------------|
| USE                            | SIZE             | SPECIES | GRADE                               | REFERENCE         |
| MUDSILLS                       | 2x4              | D.F.    | STANDARD OR BETTER PRESSURE TREATED | 2002 CBC 2303.1.9 |
|                                | 2x6 AND LARGER   | D.F.    | NO. 2 OR BETTER PRESSURE TREATED    |                   |
|                                | 2x               | D.F.    | FOUNDATION GRADE                    |                   |
| HORIZONTAL FRAMING LUMBER      |                  |         |                                     |                   |
| ROOF JOISTS AND RAFTERS        | 2x               | D.F.    | NO. 2                               |                   |
| FLOOR JOISTS                   | 2x               | D.F.    | NO. 2                               |                   |
| HEADERS AND BEAMS              | 4x               | D.F.    | NO. 2                               | WCLB & WWPFA      |
| 4x6 AND SMALLER                | D.F.             | NO. 2   |                                     |                   |
| ANY OTHER HORIZONTAL           | 6x6 AND LARGER   | D.F.    | NO. 1                               |                   |
| VERTICAL FRAMING LUMBER        |                  |         |                                     |                   |
| TOP PLATES                     | 2x               | D.F.    | NO. 2                               |                   |
| STUDS                          | 2x4 & 3x4        | D.F.    | STUD                                |                   |
|                                | 2x6 & 2x8        | D.F.    | NO. 2                               | WCLB & WWPFA      |
| POSTS                          | 4x4 AND POSTS    | D.F.    | NO. 2                               |                   |
|                                | 6x6 LARGER POSTS | D.F.    | NO. 1                               |                   |
| ALL OTHER FRAMING LUMBER       |                  |         |                                     |                   |
| ALL OTHER FRAMING LUMBER (UNO) | ALL SIZES        | D.F.    | STANDARD OR BETTER                  | WCLB & WWPFA      |

2. FLOOR JOISTS SHALL BE GRADE STAMPED "S-DRY" WHICH INDICATES A MOISTURE CONTENT NOT EXCEEDING 19 PERCENT.

3. ALL SOLE PLATES AND TOP PLATES SHALL BE GRADE STAMPED "KD" WHICH INDICATES KLN DRIED WITH A MOISTURE CONTENT NOT EXCEEDING 15 PERCENT AT BUILDINGS WITH 4 OR MORE STORIES.

4. STUD WALLS SHOWN ON PLANS ARE NONBEARING PARTITIONS WALLS. BEARING WALLS OR SHEAR WALLS BELOW THE FRAMING LEVEL, UNLESS NOTED OTHERWISE. STUDS SHALL BE SIZE AND SPACING AS NOTED IN THE DRAWINGS. SEE PLANS AND ARCHITECTURAL DRAWINGS, UNLESS OTHERWISE NOTED.

5. MINIMUM FRAMING NAILING SHALL CONFORM TO CBC TABLE 2304.10.2. ALL NAILS SHALL BE COMMON WIRE NAILS. PIEDRILL NAIL HOLES SHOULD BE 70% OF NAIL SHANK DIAMETER WHERE NAILING TENDS TO SPLIT WOOD.

6. UNLESS OTHERWISE NOTED, ALL WOOD SILL PLATES UNDER BEARING, EXTERIOR, OR SHEAR WALLS IN CONTACT WITH CONCRETE OR MASONRY SHALL BE BOLTED TO THE CONCRETE OR MASONRY WITH 5/8" @ 12" BOLTS. W/ 0.225" X 3" X 3" PLATE WASHER (GALV) AT 4'-0" O.C. BEGINNING AT 0' O.C. MAXIMUM FROM EACH END OF THE PLATES. THE BOLTS SHALL EXTEND A MINIMUM OF 7" INTO THE CONCRETE OR MASONRY. (POWDER DRIVEN PINS AT 1/3 OF THE BOLT SPACING OR 24" O.C. MAXIMUM MAY BE SUBSTITUTED FOR THE ANCHOR BOLTS AT INTERIOR NON-SHEAR WALLS ONLY).

**PRESERVATIVE TREATMENT:**

A. WOOD MEMBERS SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH ATCC 109-07 STANDARD FOR PRESERVATIVE TREATMENT, BASED ON THE SERVICE CONDITION PER THE USE CATEGORY (UCH) SPECIFIED IN AWPFA 11-28.

a. UC1 - INTERIOR CONSTRUCTION ABOVE GROUND, DRY - NO PRESERVATIVE TREATMENT REQUIRED.

b. UC2 - INTERIOR CONSTRUCTION ABOVE GROUND, WET - PRESERVATIVE TREATMENT REQUIRED IF THE HUMIDITY OR MOISTURE CONDENSATION IS 20% OR GREATER.

c. UC3 - EXTERIOR CONSTRUCTION ABOVE GROUND - PRESERVATIVE TREATMENT REQUIRED.

B. FOR ALL TREATED WOOD MEMBERS, ALL CUTS, HOLES OR INJURIES SUCH AS ABRASIONS OR HOLES FROM REMOVAL NAILS AND SPIKES WHICH MAY PENETRATE THE TREATED ZONE SHALL BE FIELD TREATED IN ACCORDANCE WITH AWPFA M4-15. THE FOLLOWING FIELD TREATMENTS SHALL BE USED:

a. BORED HOLES: HOLES FOR CONNECTORS OR BOLTS MAY BE TREATED BY PUMPING COAL TAR ROOFING CEMENT MEETING ASTM D5643 INTO HOLES USING A GREASE GUN OR SIMILAR DEVICE.

b. EXTERIOR: COPPER NATHENATE.

c. INTERIOR: INORGANIC BORON PRESERVATIVES LIMITED TO USE IN APPLICATIONS NOT IN CONTACT WITH GROUND AND CONTINUOUSLY PROTECTED FROM LIQUID WATER.

C. ALL LUMBER IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED LUMBER WITH AWPFA TREATMENT C2 USING EITHER ALKALINE QUAT (ACO TYPE B AND D), COPPER AZOLE (CBA-A, CA-B), OR SODIUM BORATES (SBX). ANCHOR BOLTS, FASTENERS, AND METAL FRAMING CONNECTORS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED TO A RATING OF G-185 PER ASTM A653.

8. PROVIDE 2 STUDS UNDER ALL 4 X 10 AND LARGER BEAMS OR HEADERS AT SPANS 6 FEET OR LONGER, UNLESS OTHERWISE NOTED. POSTS OR MULTIPLE STUDS UNDER BEAMS OR HEADERS ARE CALLED FOR ON DRAWINGS THOSE POSTS OR MULTIPLE STUDS SHALL BE CARRIED TO THE FOUNDATION/PODIUM LEVEL.

9. PROVIDE THE FOLLOWING BLOCKING AS A MINIMUM, UNLESS SHOWN OTHERWISE: 2x FULL DEPTH SOLID BLOCKING BETWEEN JOISTS OVER SUPPORT. 2x FULL DEPTH SOLID BLOCKING BETWEEN JOISTS OVER AND BELOW PARTITION WALLS.

10. DOUBLE JOISTS UNDER PARTITIONS RUNNING PARALLEL TO JOISTS, UNLESS SUPPORTED BY A WALL BELOW OR SHOWN OTHERWISE, NAIL DOUBLED JOISTS WITH 16d AT 12" O.C., STAGGERED.

11. BRIDGING SHALL BE 2 X SOLID BLOCKS, INSTALLED AS FOLLOWS:  
ROOF JOISTS MORE THAN 10' DEPTH, 8'-0" O.C. MAXIMUM, NOT MORE THAN 8'-0" FROM SUPPORT.  
FLOOR JOISTS MORE THAN 10' DEPTH, 8'-0" O.C. MAXIMUM, NOT MORE THAN 8'-0" FROM SUPPORT.

12. JOIST HANGERS AND OTHER METAL FRAMING ACCESSORIES ARE REFERRED TO ON PLANS BY PARTICULAR TYPE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, STOCKTON, CALIFORNIA. ACCESSORIES OF OTHER MANUFACTURES WITH EQUIVALENT LOAD CARRYING CHARACTERISTICS MAY BE USED WITH APPROVAL BY SEOR.

13. FIRE STOPPING, BAKING FOR INTERIOR FINISHES, NONBEARING WALLS, AND OTHER NON-STRUCTURAL FRAMING ARE NOT NECESSARILY SHOWN ON STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS.

14. THE TOP OF NON-BEARING WALLS SHALL NOT BE IN CONTACT WITH JOISTS/TRUSSES/RAFTERS ABOVE. REFER TO THE REFERENCED DETAILS FOR REQUIRED GAP, 1/2" MINIMUM, UNLESS NOTED OTHERWISE IN DETAIL.

**HARDWARE AND CONNECTIONS**

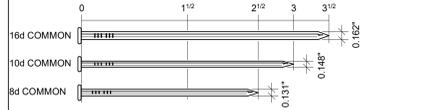
**GENERAL:**  
USE ALL SPECIFIED FASTENERS AS SPECIFIED ON PLANS. IF NOT INDICATED ON PLANS PROVIDE FASTENERS PER MFR'S APPROVED ICC-ESR REPORT OR PRODUCT LITERATURE.

**HOLD-DOWNS:**  
1. DO NOT OVER TIGHTEN NUTS ON TIE-DOWN ANCHOR RODS OR BOLTS. TIGHTEN ANCHOR ROD NUTS ONE-THIRD TO ONE-HALF TURN BEYOND FINGER TIGHT.  
2. INSTALL ALL HOLD-DOWNS TIGHT TO END STUDS/POST. DO NOT USE FILLER BLOCKS FOR MISALIGNED ANCHOR BOLTS. EXTEND THE ANCHOR ROD AT A 1:6 (HORIZ/VERT) USING A COUPLER WITH EQUIVALENT ANCHOR ROD AND INSTALL THE HOLD-DOWN HIGHER ON END STUD / POST.  
3. FOR HOLD-DOWNS THAT BOLT TO END POSTS, INSTALL THE HEAD OF THE BOLT TO THE BRACKET SIDE AND ON THE SIDE OPPOSITE THE BRACKET, INSTALL A WASHER BETWEEN THE NUT AND THE STUD / POSTS.

**TIE-DOWN & COLLECTOR STRAPS:**  
1. TIE-DOWN AND COLLECTOR STRAPS SHALL BE INSTALLED STRAIGHT AND TRUE. DO NOT FOLD, BEND, KINK OR OTHERWISE ALTER CONNECTOR STRAPS.  
2. INSTALL TIE-DOWN STRAPS DIRECT TO POST IN LIEU OF OVER SHEATHING. STRAPS MAY BE INSTALLED ON THE UNSHEATHED SIDE OF THE END STUDS / POSTS.

**FASTENER INFORMATION**

1. ALL NAILS SPECIFIED TO BE COMMON NAILS, UNLESS SPECIFIED OTHERWISE.



**COLD-FORMED STEEL (LIGHT GAGE METAL FRAMING)**

1. ALL LIGHT GAGE METAL FRAMING CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 2211 OF THE CODE AND AISI S100-16 SPECIFICATIONS FOR DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS WITH S2-20 SUPPLEMENT.  
2. MEMBER IDENTIFICATION SHALL BE AS SHOWN:

- A. MEMBER DEPTH: (EXAMPLE: 6" = 600/100 INCHES)  
ALL MEMBER DEPTHS ARE TAKEN IN 1/100 INCH INCREMENTS. FOR "I" SECTIONS, MEMBER DEPTH IS THE INSIDE TO INSIDE DIMENSION.
- B. STYLE: (EXAMPLE: STUD OR JOIST SECTION = "S")  
THE FOUR ALPHA CHARACTERS USED TO DESIGNATE THE TYPE OF SECTION ARE:  
S = STUD OR JOIST SECTIONS  
T = TRACK SECTIONS  
U = CHANNEL SECTIONS  
F = FURRING CHANNEL SECTIONS
- C. FLANGE WIDTH: (EXAMPLE: 1 5/8" = 1.625" = 162/100 INCHES)  
ALL MEMBER FLANGE WIDTH ARE TAKEN IN 1/100 INCH INCREMENTS.
- D. MATERIAL THICKNESS: (EXAMPLE: 0.064" = 64 MIL = 54/1,000 INCHES)  
MATERIAL THICKNESS IS THE MINIMUM BASE METAL THICKNESS IN MILS. MINIMUM BASE METAL THICKNESS REPRESENTS 95% OF THE DESIGN THICKNESS.



3. ALL CALCULATED MEMBER PROPERTIES PER AISI SPECIFICATIONS ARE BASED ON THE FOLLOWING THICKNESSES:

| MINIMUM THICKNESS | REFERENCE GAGE     | DESIGN THICKNESS |
|-------------------|--------------------|------------------|
| 33 MIL            | 20 GA - STRUCTURAL | 0.0346"          |
| 43 MIL            | 18 GA              | 0.0451"          |
| 54 MIL            | 16 GA              | 0.0566"          |
| 65 MIL            | 14 GA              | 0.0713"          |
| 97 MIL            | 12 GA              | 0.1017"          |
| 118 MIL           | 10 GA              | 0.1242"          |

4. ALL LIGHT GAGE METAL FRAMING SHALL CONFORM WITH THE FOLLOWING:

GALVANIZED STUDS & TRACKS: ASTM A653 SQ, GR 50 (Fy = 50,000 PSI)  
12 (97), 14 (88) OR 16 (54) GAGE (MILS)

GALVANIZED STUDS & TRACKS: ASTM A653 SQ, GR 33 (Fy = 33,000 PSI)  
18 (43), 20 (33) GAGE (MILS)

GALVANIZED BACKING PLATES: ASTM A653 SQ, GR 50 (Fy = 50,000 PSI)

GALVANIZED END CLOSURES, BRIDGING AND ACCESSORIES: ASTM A653 SQ, GR 33 (Fy = 33,000 PSI)

5. ALL LIGHT GAGE METAL FRAMING SHALL BE GALVANIZED.

6. DOUBLE VERTICAL STUDS SHALL BE STITCH WELDED TOGETHER ON BOTH FLANGES WITH 1/16" GROOVE WELDS X 1" LONG AT 12" ON CENTER, U.N.O. ON DRAWINGS.

7. TOP AND BOTTOM TRACK GAGE THICKNESS SHALL MATCH THE GAGE THICKNESS OF THE WALL STUDS, U.N.O.

8. MINIMUM STUD PROPERTIES SHALL BE PER AISI S100-16 WITH S2-20 SUPPLEMENT. THE FOLLOWING ARE ACCEPTABLE MANUFACTURERS:  
- CLARK DIETHEM (ICC ESR 4782 AND 4784P)  
- CEMCO (ICC ESR 3016)  
- APPROVED EQUAL

9. ALL SHEET METAL SCREWS SHALL PROTRUDE 1/4" MIN THROUGH METAL FRAMING.

10. THE CONTRACTOR IS PROHIBITED FROM USING TORCHES TO BURN HOLES IN TRACKS OR STUDS.

11. PUNCHED OPENINGS IN THE PARTITION WALL STUDS, EXTERIOR WALL STUDS AND ROOF/CEILING/FLOOR JOISTS NEED TO BE LOCATED A MINIMUM OF 1.5 TIMES THE DEPTH OF THE STUD FROM THE CONNECTION AT THE FLOOR, CONNECTION AT THE UNDERSIDE OF THE DECK, AND CONNECTIONS OF HEADERS AND SILLS TO JAMBS.

**STRUCTURAL STEEL**

1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED BY AN APPROVED AND LICENSED FABRICATOR IN ACCORDANCE WITH AISC 360-16 AND CHAPTER 22 OF THE CODE.

2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE ASTM DESIGNATION AS INDICATED BELOW (UNO):

| SHAPE                                      | ASTM/GRADE                             |
|--|--|
| W SHAPES, WT SHAPES                        | A992                                   |
| PLATES (INCLUDING BASE PLATES)             | A572 GR 50                             |
| ANGLES, CHANNELS                           | A36                                    |
| HSS  | A500 GRB                               |
| HIGH STRENGTH BOLTS (AS NOTED ON DRAWINGS) | A307F1852, A490B/F2280SC, A5050F18252C |
| ANCHOR RODS (UNLESS NOTED ON DRAWINGS)     | F1554 GR68                             |
| COMMON MACHINE BOLTS                       | A307 GR A                              |

3. THE STRUCTURAL STEEL FABRICATOR SHALL FURNISH SHOP DRAWINGS OF ALL STEEL FOR REVIEW AND APPROVAL BY THE AOR AND SEOR PRIOR TO FABRICATION.

4. BOLT HOLES USED IN STEEL SHALL BE 1/16" LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLT USED, EXCEPT AS NOTED.

5. ALL STRUCTURAL STEEL SURFACES THAT ARE ENCASED IN CONCRETE, MASONRY, SPRAY ON FIREPROOFING, OR ARE ENCASED BY BUILDING FINISH, SHALL BE LEFT UNPAINTED, EXCEPT AS REQUIRED FOR DESIGNATION OF PROTECTED ZONES.

6. PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED TO REINFORCED CONCRETE/MASONRY USING POST-INSTALLED ANCHORS, CONTRACTOR SHALL LOCATE ALL REINFORCEMENT AND CONFIRM CONSTRUCTABILITY OF ANCHOR LOCATIONS. SHOULD CONFLICTS WITH REINFORCEMENT OCCUR, CONTRACTOR SHALL COORDINATE AND SUBMIT ALTERNATE ANCHOR LOCATIONS AND REVISED STEEL FABRICATIONS TO SEOR FOR REVIEW AND APPROVAL. DO NOT CUT OR DAMAGE EXISTING REINFORCEMENT.

7. REFER TO ARCHITECTURAL DRAWINGS FOR STEEL FINISH. ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL EXPOSED TO THE WEATHER SHALL BE HOT DIP GALVANIZED AFTER FABRICATION, PROTECT FIELD WELDS EXPOSED TO THE WEATHER VIA PRIME AND PAINT OR BRUSH / COLD GALVANIZING. REFER TO ARCH DRAWINGS FOR STEEL FINISH.

8. ALL ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) SHALL CONFORM TO REQUIREMENTS OF AISC 303-22.

9. ALL WELDING IS TO BE DONE BY CERTIFIED WELDERS USING E70XX ELECTRODES (UNO). ALL WELDS SHALL BE IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS AND THE CODE FOR WELDING IN BUILDING CONSTRUCTION (AWS D1.1-15) OF THE AMERICAN WELDING SOCIETY. SEE SPECIAL INSPECTIONS SECTION FOR WELDING INSPECTION REQUIREMENTS. ALL WELDING FOR ELEMENTS OF THE LATERAL FORCE RESISTING SYSTEM SHALL PER AWS D1.8-16.

10. THE CONTRACTOR SHALL SUBMIT ALL WELDING PROCEDURE SPECIFICATIONS FOR REVIEW AND APPROVAL BY SEOR. THE SUBMITTED WELDING PROCEDURES SHALL INCLUDE ONLY THOSE PROCEDURES RELEVANT TO THIS PROJECT. ALL WELDED JOINTS SHALL BE PREQUALIFIED PER AWS OR BE QUALIFIED BY TEST PER AWS. A PROCEDURE QUALIFICATION RECORD (PQR) SHALL BE INCLUDED WITH THE WPS IF THE WELDING PROCEDURE OR JOINT IS QUALIFIED BY TESTING. THE ELECTRODE MANUFACTURER AND PRODUCT/TRADE NAME SHALL BE IDENTIFIED IN THE WPS IN ADDITION TO THE AWS ELECTRODE CLASSIFICATION NAME. A COPY OF THE ELECTRODE MANUFACTURER'S TECHNICAL DATA SHEETS WITH THE RECOMMENDED WELDING PARAMETERS SHALL BE SUBMITTED WITH THE WPS.

11. 100 PERCENT ULTRASONIC TESTING IS REQUIRED FOR ALL COMPLETE JOINT PENETRATION GROOVE WELDS.

12. IF INTERMIXING OF WELD FILLER MATERIAL IS REQUIRED AT SPECIFIC WELDED JOINTS AND IF ONE OF THE FILLER METALS IS FCAW-S, SUBMIT A WELDING PROCEDURE SPECIFICATION (WPS) AND QUALIFY BY TESTING.

13. DISCONTINUITIES IN WELDS CREATED BY ERRORS OR BY FABRICATION OR ERECTION OPERATIONS, SUCH AS TACK WELDS, ERECTION AIDS, AIR ARC GOUGING AND FLAME CUTTING SHALL BE REPAIRED AS REQUIRED BY SEOR.

**CONCRETE PROTECTION FOR REINFORCEMENT**

| THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT UNLESS INDICATED OTHERWISE   | MINIMUM COVER, IN        |
|---|--------------------------|
| A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH   | 3                        |
| B. CONCRETE EXPOSED TO EARTH OR WEATHER: NO. 5 BAR, W/31 OR D31 WIRE & SMALLER  | 2 1/4"                   |
| C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:<br>SLABS, WALLS, JOISTS, NO. 4 AND JOIST BARS, NO. 3 AND JOIST BARS, BEAMS, COLUMNS, PRIMARY REINFORCEMENT TIE, STRIPS, SPIRALS | 1 1/4"<br>3/4"<br>1 1/4" |

13. MECHANICAL BAR SPlice CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-19 SECTION 25.5.7 USE OF MECHANICAL CONNECTIONS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER. SPLICES MUST BE TESTED AS INDICATED IN THE CONCRETE REINFORCEMENT SPECIFICATION. ACCEPTABLE PRODUCTS INCLUDE:

- LENTON STANDARD COUPLERS (IAPMO-ES 0129)
- LENTON FORM SAVERS, TYPE SA (IAPMO-ES 0129)
- LENTON WELDABLE HALF COUPLERS (IAPMO-ES 0129)
- LENTON LOCK COUPLERS PER (IAPMO-ES 0129)

NOTE THAT REBAR ATTACHED TO PLATE USING LENTON WELDABLE HALF COUPLERS SHALL BE ASTM A706 PER IAPMO-ES 0129.

ALL MECHANICAL BAR SPlice CONNECTIONS IN SPECIAL STRUCTURAL WALLS, SPECIAL MOMENT FRAMES AND CONCRETE DIAPHRAGMS SHALL BE TYPE 2 CONFORMING TO THE REQUIREMENTS OF ACI 318-19 SECTION 18.2.7 & 18.12.7.4

**REINFORCING STEEL**

1. REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 19 OF THE CODE AND WITH THE PROVISIONS OF ACI 318-19. ASTM A706, GRADE 60 UNO. ASTM A615 OR 60 STEEL MAY BE SUBSTITUTED FOR ASTM A706 GR60 STEEL PER ACI 318-19 SECTION 20.2.5 PROVIDED THE FOLLOWING CONDITIONS ARE MET:

- A. THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED THE SPECIFIED YIELD STRENGTH BY MORE THAN 16,000 PSI.
- B. THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRESS TO THE ACTUAL YIELD STRENGTH IS NOT LESS THAN 1.25.
- C. WHERE REINFORCEMENT COMPLYING WITH ASTM A615 IS TO BE WELDED, CHEMICAL TESTS SHALL BE PERFORMED TO DETERMINE WELDABILITY IN ACCORDANCE WITH SECTION 26.6.4 OF ACI 318-19.

2. BARS SHALL BE CLEAN OF RUST, GREASE, OR OTHER MATERIALS LIKELY TO IMPAIR BOND. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.

3. WELDED WIRE REINFORCEMENT (WWR), PLAIN OR DEFORMED, SHALL CONFORM TO ASTM A185. WELDED DEFORMED WIRE REINFORCEMENT (WWR) SHALL CONFORM TO ASTM A1064. ALL WWR FOR STAIR PANS AND ALL WWR FOR CONCRETE FILL ON METAL DECK TO BE PLAIN WWR. PROVIDE LAPS PER ACI 318-19 SECTION 25.5.3 OR 25.5.4 MINIMUM. WWR SHALL BE SUPPORTED ON APPROVED CHAIRS.

4. REINFORCING BAR LAP SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS. LAP ALL HORIZONTAL BARS AT CORNERS AND INTERSECTIONS. STAGGER ALL SPLICES UNLESS NOTED OTHERWISE ON PLANS.

A. MINIMUM LAP SPlice LENGTH FOR REINFORCING STEEL BARS IN CONCRETE SHALL BE PER ACI 318-19 SECTION 25.5.2 AND THE REINFORCING SCHEDULE ON THE DRAWINGS.

B. MINIMUM LAP SPlice LENGTH FOR REINFORCING STEEL BARS IN MASONRY SHALL BE PER TMS 042-16 SECTION 6.1.6.1.1 AND THE REINFORCING SCHEDULE ON THE DRAWINGS.

ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE. ALL REINFORCING CONFORMING TO DIFFERING ASTM SPECIFICATIONS AND/OR DIFFERING GRADES SHALL BE CLEARLY MARKED TO DIFFERENTIATE THEM FROM OTHER REINFORCING STEEL IF CONCURRENTLY PRESENT ON SITE.

6. WHERE WELDING OF REINFORCING IS APPROVED BY THE STRUCTURAL ENGINEER, IT SHALL BE DONE BY AWS CERTIFIED WELDERS USING E80XX OR APPROVED ELECTRODES. WELDING PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF STRUCTURAL WELDING CODE, REINFORCING STEEL, AWS D1.4-15; REINFORCING BARS TO BE WELDED SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706.

7. REINFORCING STEEL SHALL BE ACCURATELY PLACED, ADEQUATELY SUPPORTED AND SHALL BE SECURED AGAINST DISPLACEMENT, AND TIED BEFORE THE CONCRETE IS PLACED DURING CONSTRUCTION WITHIN PERMITTED TOLERANCES. ADEQUATE SUPPORTS ARE ALSO NECESSARY TO KEEP THE REINFORCING STEEL AT THE PROPER DISTANCE FROM THE FORMS. USE WIRE BAR SUPPORTS, PRECAST CONCRETE SUPPORTS, SPACERS, BOLTSTERS, REINFORCEMENT OR OTHER MEANS OF SUPPORT PER THE "CRSI MANUAL OF STANDARD PRACTICE", LATEST EDITION.

8. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE "CRSI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", LATEST EDITION.

9. COMPLETE AND DETAILED REINFORCING PLACEMENT DRAWINGS SHALL BE PREPARED AND SUBMITTED TO THE ARCHITECT FOR APPROVAL BY THE SEOR PRIOR TO FABRICATION IN ACCORDANCE WITH THE SPECIFICATIONS AND APPLICABLE CODES. THESE DRAWINGS SHALL BE AVAILABLE ON THE JOB SITE PRIOR TO PLACING OF CONCRETE. THE REINFORCING PLACEMENT DRAWINGS SHALL INCLUDE ALL PRIMARY REINFORCING, TIE BARS, TIE DOWN S, HEADED U-DOWNS, EMBED PLATES, ANCHOR BOLTS, ETC. AREAS OF CONGESTION SHALL BE DETAILED SUFFICIENTLY TO DEMONSTRATE THAT PLACEMENT OF REBAR MEETS SPACING REQUIREMENTS OF ACI 318-19.

10. MILL TEST REPORTS FOR GRADE 60 BARS SHALL BE SUBMITTED TO THE INSPECTOR OF RECORD PRIOR TO PLACEMENT OF CONCRETE PER ACI 318-19 SECTION 26.13.2.3 OF THE CODE.

11. WHEN RECD, INSPECTION OF CONCRETE SHALL INCLUDE INSPECTION DURING INSTALLATION OF REINFORCING STEEL. INSPECTION SHALL BE SCHEDULED SO THAT PLACEMENT OF REINFORCING STEEL, CONDUIT, SLEEVES, AND EMBEDDED ITEMS MAY BE CORRECTED PRIOR TO PLACEMENT OF OVERLYING GRIDS OR REINFORCING STEEL.

**CONCRETE PROTECTION FOR REINFORCEMENT**

| THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT UNLESS INDICATED OTHERWISE   | MINIMUM COVER, IN        |
|---|--------------------------|
| A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH   | 3                        |
| B. CONCRETE EXPOSED TO EARTH OR WEATHER: NO. 5 BAR, W/31 OR D31 WIRE & SMALLER  | 2 1/4"                   |
| C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:<br>SLABS, WALLS, JOISTS, NO. 4 AND JOIST BARS, NO. 3 AND JOIST BARS, BEAMS, COLUMNS, PRIMARY REINFORCEMENT TIE, STRIPS, SPIRALS | 1 1/4"<br>3/4"<br>1 1/4" |

13. MECHANICAL BAR SPlice CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-19 SECTION 25.5.7 USE OF MECHANICAL CONNECTIONS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER. SPLICES MUST BE TESTED AS INDICATED IN THE CONCRETE REINFORCEMENT SPECIFICATION. ACCEPTABLE PRODUCTS INCLUDE:

- LENTON STANDARD COUPLERS (IAPMO-ES 0129)
- LENTON FORM SAVERS, TYPE SA (IAPMO-ES 0129)
- LENTON WELDABLE HALF COUPLERS (IAPMO-ES 0129)
- LENTON LOCK COUPLERS PER (IAPMO-ES 0129)

NOTE THAT REBAR ATTACHED TO PLATE USING LENTON WELDABLE HALF COUPLERS SHALL BE ASTM A706 PER IAPMO-ES 0129.

ALL MECHANICAL BAR SPlice CONNECTIONS IN SPECIAL STRUCTURAL WALLS, SPECIAL MOMENT FRAMES AND CONCRETE DIAPHRAGMS SHALL BE TYPE 2 CONFORMING TO THE REQUIREMENTS OF ACI 318-19 SECTION 18.2.7 & 18.12.7.4

**EXISTING CONDITIONS**

ALL INFORMATION SHOWN ON THE PLANS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE FROM PLANS SUPPLIED BY THE OWNER, BUT WITHOUT GUARANTEE OF ACCURACY.

2. WHERE ACTUAL CONDITIONS ARE NOT IN ACCORDANCE WITH THE INFORMATION PRESENTED, THE ARCHITECT AND/OR STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY. NO MODIFICATIONS OF THE PLANS FOR NEW CONSTRUCTION SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.

**EXISTING UNDERGROUND UTILITIES**

1. THE ARCHITECT AND ENGINEERS ARE NOT RESPONSIBLE FOR THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE DRAWINGS. DRAWINGS, IF ANY, IS APPROXIMATE. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THE SITE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND/OR STRUCTURAL ENGINEER SHOULD ANY SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES WHICH MAY RESULT FROM HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES.

3. AN UNDERGROUND SERVICE ALERT INQUIRY IDENTIFICATION NUMBER MUST BE OBTAINED AT LEAST TWO WORKING DAYS BEFORE STARTING WORK WITH THIS PERMIT.

A. FOR PROJECTS IN SOUTHERN CALIFORNIA TELEPHONE NO. 1-800-422-4133.  
B. FOR PROJECTS IN NORTHERN CALIFORNIA TELEPHONE NO. 1-800-227-2800.

**DEMOLITION**

1. ALL DEMOLITION SHALL BE CARRIED ON IN SUCH A WAY AS NOT TO DAMAGE EXISTING ELEMENTS WHICH ARE TO REMAIN IN THE FINISHED STRUCTURE.

2. ALL ELEMENTS OF THE STRUCTURE, WHICH ARE TO REMAIN, AND WHICH ARE DAMAGED DURING DEMOLITION WORK SHALL BE REPLACED AT NO ADDITIONAL COST. EXISTING ELEMENTS SHALL BE PROTECTED TO THE FULLEST EXTENT POSSIBLE, IN ORDER TO MITIGATE DAMAGE.

3. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF ALL EXISTING ELEMENTS THAT ARE NECESSARY FOR THE INSTALLATION OF ALL NEW WORK.

4. WHERE EXISTING PARTITION WALLS ARE TO BE DEMOLISHED, CONTRACTOR SHALL VERIFY WALLS ARE NON-BEARING PRIOR TO DEMOLITION. IF WALLS ARE FOUND TO BE BEARING, CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY.

**CONCRETE**

1. ALL CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19 OF THE CODE AND WITH THE PROVISIONS OF ACI 318-19.

2. CONCRETE MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:

| MATERIAL                              | ASTM STANDARD |
|---------------------------------------|---------------|
| PORTLAND CEMENT (TYPE I) <sup>a</sup> | C150          |

REQUIRED VERIFICATION AND INSPECTIONS

Table with columns: SPECIAL INSPECTION OR TEST, CONTINUOUS, PERIOD, REFERENCE STANDARD, CBC STANDARD. Includes sections for CONCRETE CONSTRUCTION and STEEL WELDING.

1. WHERE APPLICABLE, SEE SECTION 1705.13.

2. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI 318, OR OTHER QUALIFICATION PROCEDURES.

REQUIRED VERIFICATION AND INSPECTIONS

Table with columns: INSPECTION TASKS PRIOR TO WELDING, QC, QA, AWS 2015 D1.1 REFERENCE. Includes sections for CONCRETE CONSTRUCTION and STEEL WELDING.

1. MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS

2. FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS

3. CORRECT FASTENERS SELECTED FOR THE JOINT DETAILS (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)

4. CORRECT BOLTING DETAILS SELECTED FOR THE JOINT DETAIL

5. CONNECTED ELEMENTS, INCLUDING THE APPROPRIATE FINISH SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS

6. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLY AND METHODS USED

7. PROTECTED STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS, AND OTHER FASTENER COMPONENTS

8. FASTENER ASSEMBLIES, PLACED IN ALL HOLES AND WASHERS AND NUTS ARE POSITIONED AS REQUIRED

9. JOINT BROUGHT TO THE TIGHT CONDITION PRIOR TO THE PRE-TENSIONING OPERATION

10. FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING

11. FASTENERS ARE PRE-TENSIONED IN ACCORDANCE WITH THE RISC SPECIFICATION PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES

12. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS

STATEMENT OF SPECIAL INSPECTIONS

1. THIS STATEMENT OF SPECIAL INSPECTIONS HAS BEEN PREPARED PURSUANT TO SECTION 1704.3 OF THE CODE. THIS SECTION DETAILS BOTH REQUIRED SPECIAL INSPECTIONS AND TESTS INCLUDING TESTING PER SECTION 1705 OF THE CODE. THE FOLLOWING SHALL BE OBSERVED DURING THEIR IMPLEMENTATION:

- A. GENERAL
1. STRUCTURAL VERIFICATIONS, INSPECTIONS AND TESTS SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF THE CODE AND/OR THE APPLICABLE REFERENCE STANDARD.

- B. OWNER REQUIREMENTS:
1. THE OWNER OR OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN SECTION 1705 OF THE CODE AND IN THIS STATEMENT OF INSPECTIONS.

- C. SPECIAL INSPECTOR QUALIFICATIONS:
1. THE SPECIAL INSPECTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING HIS OR HER COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING. THE EXPERIENCE OR TRAINING SHALL BE CONSIDERED RELEVANT WHEN THE DOCUMENTED EXPERIENCE OR TRAINING IS RELATED IN COMPLEXITY TO THE SAME TYPE OF SPECIAL INSPECTION ACTIVITIES FOR PROJECTS OF SIMILAR COMPLEXITY AND MATERIAL QUALITIES.

- D. CONTRACTOR REQUIREMENTS:
1. SPECIAL INSPECTION IS IN ADDITION TO THE CONTRACTOR'S QUALITY CONTROL INSPECTIONS AND TESTING. THE CONTRACTOR'S QUALITY CONTROL INSPECTIONS AND TESTING SHALL OCCUR PRIOR TO SPECIAL INSPECTION AND REPORTS SHALL BE AVAILABLE TO THE SPECIAL INSPECTOR.

- E. SPECIAL INSPECTOR REPORT REQUIREMENTS:
1. THE SPECIAL INSPECTOR SHALL KEEP RECORD OF INSPECTIONS

- F. A FINAL REPORT DOCUMENTING SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED SHALL BE SUBMITTED TO THE BUILDING OFFICIAL.

SUBMITTALS

1. THE FOLLOWING SUBMITTALS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER:

- A. STEEL INCLUDING MISC. METALS
1. SHOP DRAWINGS FOR FABRICATION AND ERECTION
2. WELD PROCEDURES (INCLUDING PREQUALIFICATION RECORDS), TO BE SUBMITTED TO PROJECT C/W
3. SHOP DRAWINGS FOR FABRICATION AND PLACEMENT

2. BEFORE SUBMITTING EACH SUBMITTAL, (INCLUDES SHOP DRAWINGS, PRODUCT DATA SAMPLES AND SIMILAR SUBMITTALS), THE CONTRACTOR SHALL HAVE:

- A. REVIEWED AND COORDINATED EACH SUBMITTAL WITH OTHER SUBMITTALS AND WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS. THIS INCLUDES THE CONTRACTOR REVIEWING AND VERIFYING THAT THE SUBMITTAL IS COORDINATED AMONG ALL CONSTRUCTION TRADES.
B. DETERMINED AND VERIFIED ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE AND DESIGN CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR INFORMATION
C. DETERMINED AND VERIFIED ALL INFORMATION RELATIVE TO THE CONTRACTOR'S RESPONSIBILITIES FOR MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION, AND SAFETY PRECAUTIONS AND PROGRAMS.
D. REVIEWED AND VERIFIED THAT THE ARCHITECT'S OR ENGINEER'S COMMENTS FROM PREVIOUS SUBMITTAL ROUNDS HAVE BEEN ADDRESSED.

3. EACH SUBMITTAL SHALL BEAR A STAMP OR SPECIFIC WRITTEN CERTIFICATION THAT THE CONTRACTOR HAS SATISFIED THEIR OBLIGATIONS UNDER THE CONTRACT DOCUMENTS WITH RESPECT TO THE CONTRACTOR'S REVIEW AND APPROVAL OF THAT SUBMITTAL.

4. THE CONTRACTOR'S OBLIGATION TO PERFORM AND COMPLETE THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS SHALL BE ABSOLUTE:

- a. REVIEW AND APPROVAL OF SHOP DRAWINGS BY THE ARCHITECT AND/OR ENGINEER DOES NOT CONSTITUTE APPROVAL OF A CHANGE REQUEST, SUBSTITUTION OR MODIFICATION TO THE CONTRACT DRAWINGS.
b. THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED OF CHANGE REQUESTS, SUBSTITUTIONS OR MODIFICATIONS TO THE CONTRACT DRAWINGS IN WRITING BEFORE AND SEPARATE FROM THE SUBMITTAL PRIOR TO SUBMISSION.

5. FABRICATION FOR ITEMS IN THESE DOCUMENTS SHALL NOT COMMENCE UNTIL THE SUBMITTAL HAS BEEN REVIEWED AND APPROVED BY THE ENGINEER.

6. THE CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOR THE ENGINEER OF RECORD TO THOROUGHLY REVIEW SUBMITTAL PACKAGES (10 WORKING DAYS, MINIMUM).

TESTING CRITERIA FOR POST-INSTALLED ANCHORS IN CONCRETE / MASONRY

1. CONDUCT TESTING OF POST-INSTALLED ANCHORS PER SECTION 1901.3.4 OF THE CODE.

2. WHERE THE MANUFACTURER'S INSTALLATION INSTRUCTIONS OR APPLICABLE ICC-ES EVALUATION SERVICES REPORT CALL FOR THE APPLICATION OF AN INSTALLATION TORQUE, THE SPECIFIED INSTALLATION TORQUE SHALL NOT BE EXCEEDED.

3. THE SPECIAL INSPECTOR SHALL BE ON THE JOBSITE DURING ANCHOR INSTALLATIONS AS REQUIRED PER CHAPTER 17 OF THE CODE, UNLESS OTHERWISE NOTED IN ICC-ES ESR. TO VERIFY ANCHOR, ANCHOR DIMENSIONS, CONCRETE TYPE, CONCRETE COMPRESSIVE STRENGTH, HOLE DIMENSIONS, ANCHOR SPACING, EDGE DISTANCES, SLAB THICKNESS, ANCHOR EMBEDMENT, AND INSTALLATION TORQUE.

4. TEST LOAD: REQUIRED TEST LOADS SHALL BE DETERMINED BY ONE OF THE FOLLOWING METHODS:
A. TWICE THE MAXIMUM ALLOWABLE TENSION LOAD OR ONE AND A QUARTER (1 1/4) TIMES THE MAXIMUM DESIGN STRENGTH PROVIDED BY THE ICC REPORT OR DETERMINED PER ACI 318. THE TENSION TEST LOAD NEED NOT TO EXCEED 80 PERCENT OF THE NOMINAL YIELD STRENGTH OF THE ANCHOR (0.8 AS F<sub>y</sub>). SEE STRUCTURAL DETAILS FOR DESIGN-BASED TENSION TEST LOADS FOR ADHESIVE ANCHORS.

5. TENSION OR TORQUE TESTING OF POST-INSTALLED ANCHORS SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO THE IOR AND ENFORCEMENT AGENCY.

6. THE SPECIAL INSPECTOR SHALL SELECT ANCHORS FOR TESTING AT RANDOM.

7. TEST FREQUENCY:

Table with columns: APPLICATION, QUANTITY. Includes rows for STRUCTURAL (100% OF BOLTS), NON-STRUCTURAL (50% ALTERNATE BOLTS IN A GROUP), SILL PLATE BOLTING (10% OF BOLTS).

EXCEPTIONS:
A. UNDERCUT ANCHORS THAT ALLOW VISUAL CONFIRMATION OF FULL SET SHALL NOT REQUIRE TESTING.

B. WHERE THE FACTORED DESIGN TENSION ON ANCHORS IS LESS THAN 100 LBS AND THOSE ANCHORS ARE CLEARLY NOTED ON THE APPROVED CONSTRUCTION DOCUMENTS.

C. WHERE ADHESIVE ANCHOR SYSTEMS ARE USED TO INSTALL REINFORCING DOWEL BARS IN HARDENED CONCRETE, ONLY 25 PERCENT OF THE DOWELS SHALL BE TESTED IF ALL OF THE FOLLOWING CONDITIONS ARE MET:

- THE DOWELS ARE USED EXCLUSIVELY TO TRANSMIT SHEAR FORCES ACROSS JOINTS BETWEEN EXISTING AND NEW CONCRETE
- THE NUMBER OF DOWELS IN ANY ONE MEMBER EQUALS OR EXCEEDS 12.
- THE DOWELS ARE UNIFORMLY DISTRIBUTED ACROSS SEISMIC FORCE RESISTING MEMBERS (SUCH AS SHEAR WALLS, COLLECTORS, AND DIAPHRAGMS).

D. TESTING OF SHEAR DOWELS ACROSS COLD JOINTS IN SLAB ON GRADE, WHERE THE SLAB IS NOT PART OF THE LATERAL FORCE-RESISTING SYSTEM SHALL NOT BE REQUIRED.

E. TESTING IS NOT REQUIRED FOR POWER ACTUATED FASTENERS USED TO ATTACH TRACKS OF INTERIOR NON-SHEAR WALL PARTITIONS FOR SHEAR ONLY, WHERE THERE ARE AT LEAST THREE FASTENERS PER SEGMENT OF TRACK.

8. TEST METHODS: TEST LOADS MAY BE APPLIED BY ANY METHOD THAT WILL EFFECTIVELY TRANSMIT A MEASURABLE TENSION LOAD TO THE ANCHOR. ACCEPTABLE METHODS INCLUDE:

- A. USE OF HYDRAULIC JACK, WHEREBY EITHER UNCONFINED OR CONFINED TESTING SHALL BE ACCEPTABLE;
B. USE OF CALIBRATED SPRING LOADED DEVICES; OR
C. USE OF A CALIBRATED TORQUE WRENCH FOR TORQUE-CONTROLLED EXPANSION ANCHORS.

9. TEST ACCEPTANCE CRITERIA: ACCEPTANCE CRITERIA FOR POST-INSTALLED ANCHORS SHALL BE BASED ON THE ICC REPORT OR MANUFACTURER'S WRITTEN INSTRUCTION AS ACCEPTABLE TO OSHPD. FIELD TESTS SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENTS:

A. HYDRAULIC RAM METHOD: ANCHORS TESTED WITH A HYDRAULIC JACK OR SPRING LOADED DEVICES SHALL MAINTAIN THE TEST LOAD FOR A MINIMUM OF 15 SECONDS AND SHALL EXHIBIT NO DISCERNABLE MOVEMENT DURING THE TENSION TEST, E.G. AS EVIDENCED BY LOOSENING OF THE WASHER UNDER THE NUT. SCREW ANCHORS MAY BE LOOSENEA A MAXIMUM ONE FULL TURN TO FACILITATE THE POSITIONING OF A TENSION TEST COLLAR.

B. TORQUE WRENCH METHOD: ANCHORS TESTED WITH A CALIBRATED TORQUE WRENCH MUST ATTAIN THE SPECIFIED TORQUE WITHIN HALF (1/2) TURN OF THE NUT.

EXCEPTIONS:
- WEDGE OR SLEEVE TYPE: ONE-QUARTER (1/4) TURN OF THE NUT FOR A 3/8 INCH ANCHOR ONLY.
- THREADED TYPE: ONE-QUARTER (1/4) TURN OF THE SCREW AFTER INITIAL SEATING OF THE SCREW HEAD.

10. IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME TYPE, INSTALLED BY THE SAME TRADE, AND NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE ANCHORS PASS, THEN RESUME INITIAL TEST FREQUENCY.

11. REQUIRED TORQUE TEST LOADS SHALL BE EQUAL TO THE MANUFACTURER'S RECOMMENDED INSTALLATION TORQUE PROVIDED IN THE ICC-ESR FOR THE SPECIFIC ANCHOR. TEST TORQUE VALUES ARE SUMMARIZED IN THE TABLE BELOW.

Table with columns: LOCATION IN STRUCTURE, INCHES, SIMPSON STRONG-BOLT Z2 (ICC ESR-3037), SIMPSON TITEN HD (ICC ESR-0713).

Table with columns: NOMINAL ANCHOR DIAMETER, INCHES, METRIC, HLT1 KWIK-BOLT T2Z (ICC ESR-4296), HLT1 KWIK-BOLT T2Z (ICC ESR-4296) STAINLESS STEEL, HLT1 H402Z (ICC ESR-3307).

POST-INSTALLED ANCHORS IN CONCRETE / MASONRY

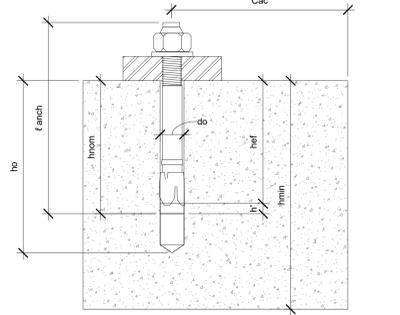
1. POST-INSTALLED ANCHOR CAPACITIES SHALL BE DETERMINED PER SECTION 1909A OF THE CODE USING STRENGTH DESIGN. POST INSTALLED ANCHORS IN CONCRETE USED FOR COMPONENT ANCHORAGE SHALL BE PREQUALIFIED FOR SEISMIC APPLICATIONS IN ACCORDANCE WITH ACI 308.2. POST INSTALLED ANCHORS IN MASONRY SHALL BE PREQUALIFIED FOR SEISMIC APPLICATIONS IN ACCORDANCE WITH APPROVED QUALIFICATION PROCEDURES.

2. INSTALLATION OF POST-INSTALLED ANCHORS SHALL BE IN ACCORDANCE WITH THE APPLICABLE ICC EVALUATION REPORT.

Table with columns: SUBSTRATE MATERIAL, ANCHOR TYPE, ANCHOR PRODUCT, ICC EVALUATION REPORT, ACCEPTANCE CRITERIA. Lists products like SIMPSON STRONG-BOLT Z2, SIMPSON TITEN HD, etc.

3. EXPANSION ANCHOR EMBEDMENTS IN THE DRAWINGS ARE MINIMUM EFFECTIVE EMBEDMENTS (h<sub>ef</sub>) AS SHOWN IN THE ICC REPORT CORRESPONDING TO THE ANCHOR.

h<sub>ef</sub> = EFFECTIVE EMBEDMENT DEPTH OF ANCHOR
h<sub>m</sub> = MINIMUM SUBSTRATE THICKNESS INTO WHICH ANCHOR IS EMBEDDED
c = CRITICAL SUBSTRATE EDGE DISTANCE
h<sub>o</sub> = MINIMUM HOLE DEPTH
l<sub>anch</sub> = ANCHOR LENGTH
l<sub>o</sub> = PROJECTION OF ANCHOR BEYOND EFFECTIVE EMBEDMENT DEPTH
d<sub>o</sub> = DIAMETER OF ANCHOR (EQUAL TO THREAD SIZE OF ANCHOR)
h<sub>nom</sub> = NOMINAL EMBEDMENT DEPTH OF ANCHOR



4. LOCATE ALL EXISTING REINFORCEMENT BY NON-DESTRUCTIVE MEANS (X-RAY, PACOMETER, GPR, ETC.) PRIOR TO DRILLING OR INSTALLING POST-INSTALLED ANCHORS. COORDINATE POST-INSTALLED ANCHOR LOCATIONS WITH LOCATIONS OF EXISTING REINFORCEMENT. DO NOT CUT OR DAMAGE EXISTING REINFORCEMENT.

5. ALL POST-INSTALLED ANCHORS USED IN DRY INTERIOR CONDITIONS SHALL BE CARBON STEEL, U.N.O

6. ALL POST-INSTALLED ANCHORS USED AT EXTERIOR CONDITIONS, EXPOSED TO THE ELEMENTS, OR USED IN A DAMP ENVIRONMENT (I.E. KITCHENS) SHALL BE STAINLESS STEEL, U.N.O.

7. WHERE POST-INSTALLED MECHANICAL ANCHORS ARE USED FOR NON-VIBRATION ISOLATED MECHANICAL EQUIPMENT RATED OVER 10 HP, THEY SHALL BE QUALIFIED IN ACCORDANCE WITH ACI 355.2.

8. IF THE CONCRETE CRACKS DURING THE INSTALLATION OF AN ANCHOR, THE ANCHOR SHALL BE REMOVED OR ABANDONED.

9. ABANDONED ANCHORS AND ABANDONED ANCHOR HOLES:

- A. FILL ALL EMPTY ABANDONED ANCHOR HOLES WITH A DRY-PACK MORTAR.
B. FOR ABANDONED EXPANSION ANCHORS WHICH CANNOT BE REMOVED WITHOUT DAMAGING THE SUBSTRATE, CUT/BURN OFF THE END OF THE BOLT FLUSH WITH THE FACE OF CONCRETE/MASONRY AND THEN DRIVE ABANDONED ANCHOR TO BOTTOM OF HOLE. FILL REMAINDER OF HOLE WITH A DRY-PACK MORTAR.
C. FOR ABANDONED ADHESIVE OR UNDERCUT ANCHORS WHICH CANNOT BE REMOVED WITHOUT DAMAGING THE SUBSTRATE, BURN OFF THE END OF THE BOLT/ROD 1" BELOW THE SURFACE OF CONCRETE/MASONRY AND FILL REMAINDER OF HOLE WITH A DRY-PACK MORTAR.
D. ABANDONED ANCHOR HOLES (WHETHER FILLED WITH DRY-PACK OR CONTAINING ABANDONED ANCHORS) MAY NOT BE LOCATED ANY CLOSER THAN 3x DIAMETER CENTER-TO-CENTER TO ANY ANCHOR IN SERVICE. ANCHORS NOT MEETING THIS MINIMUM SPACING MAY HAVE REDUCED CAPACITY AND SHALL BE REVIEWED WITH THE SEOR.

LIMITATIONS OF USE OF POWER ACTUATED FASTENERS:

PER SECTION 13.4.5 OF ASCE 7-16 POWER ACTUATED FASTENERS IN CONCRETE OR STEEL SHALL NOT BE USED FOR SUSTAINED TENSION LOADS OR FOR BRACE APPLICATIONS IN SEISMIC UNLESS APPROVED FOR SEISMIC LOADING. POWER ACTUATED FASTENERS IN MASONRY SHALL NOT BE PERMITTED UNLESS APPROVED FOR SEISMIC LOADING. EXCEPTION: POWER ACTUATED FASTENERS IN CONCRETE USED FOR SUPPORT OF ACUSTICAL TILE OR LAY-IN PANEL SUSPENDED CEILING APPLICATIONS AND DISTRIBUTED SYSTEMS WHERE THE SERVICE LOAD ON ANY INDIVIDUAL FASTENER DOES NOT EXCEED 90 LB.

WOOD STRUCTURAL PANELS (SHEATHING)

WOOD STRUCTURAL PANELS SHALL MEET THE FOLLOWING MINIMUM STANDARDS EXCEPT WHERE OTHERWISE NOTED:

Table with columns: USE, PLY, BOND CLASSIFICATION, SHEATHING GRADE, PERFORMANCE RATING, SPAN RATING, RATIO, REFERENCE. Includes rows for ROOF and FLOOR.

TABLE NOTES:
A. WOOD STRUCTURAL PANELS SHALL CONFORM TO THE REQUIREMENTS FOR THEIR TYPE IN ACCORDANCE WITH THE FOLLOWING VOLUNTARY STANDARDS BY THE ENGINEERED WOOD ASSOCIATION (AWA):
a. VOLUNTARY PRODUCT STANDARD, STRUCTURAL PLYWOOD, PS 1-09
b. VOLUNTARY PRODUCT STANDARD, PERFORMANCE STANDARD FOR WOOD-BASED STRUCTURAL-USE PANELS, PS 2-10

B. WOOD STRUCTURAL PANELS SHALL BE IDENTIFIED BY THE APA TRADEMARK INDICATING CONFORMANCE TO THE APPLICABLE VOLUNTARY STANDARD

C. WHERE PANELS ARE EXPOSED TO REPEATED WETTING AND REDRYING, LONG-TERM EXPOSURE TO WEATHER, OR CONDITIONS OF SIMILAR SEVERITY, "EXTERIOR" APA RATED PLYWOOD SHEATHING SHALL BE USED. "D EXPOSURE" APA RATED PLYWOOD SHEATHING (CDA) SHALL NOT BE USED FOR CONDITIONS INVOLVING LONG-TERM EXPOSURE TO WEATHER.

a. EXCEPTION: WOOD STRUCTURAL PANEL ROOF SHEATHING EXPOSED TO THE OUTDOORS ON THE UNDERSIDE IS PERMITTED TO BE "EXPOSURE 1" TYPE.
b. WOOD STRUCTURAL PANELS TO BE USED AS SIDING SHALL COMPLY WITH ANSI/APA PRF-210.

D. ORIENTED STRAND BOARD (OSB) WITH EQUIVALENT CLASSIFICATION AND RATINGS MAY BE USED IN LIEU OF PLYWOOD FOR WOOD STRUCTURAL PANEL WALL SHEATHING.

B. STORAGE
a. ALWAYS STORE THE PANELS UNDER COVER WHENEVER POSSIBLE
b. WHEN STORING PANELS OUTSIDE STACK THEM ON A LEVEL SURFACE ON TOP OF STRINGERS OR OTHER BLOCKING, THREE STRINGERS MINIMUM.
c. NEVER LEAVE PANELS IN CONTACT WITH THE GROUND
d. COVER THE STACK WITH A PLASTIC TARP, ENSURING THAT THE BUNDLE IS WELL VENTILATED TO PREVENT MILDEW.
e. IF MOISTURE ABSORPTION IS EXPECTED, CUT THE STEEL BAND TO PREVENT DAMAGE.
f. KEEP SANDED OR OTHER APPEARANCE GRADE PANELS AWAY FROM HIGH TRAFFIC AREAS

C. HANDLING
a. ALWAYS PROTECT ENDS AND EDGES, ESPECIALLY TONGUE AND GROOVE PRODUCTS, FROM PHYSICAL DAMAGE.
b. ACCLIMATE THE PANELS FOR 24 HOURS MINIMUM BEFORE INSTALLATION BY STANDING THE PANELS ON EDGE WITH A GAP BETWEEN EACH TO ALLOW FOR AIR CIRCULATION OR PER MANUFACTURER'S RECOMMENDATIONS.

3. PLYWOOD ORIENTATION
A. ROOF AND FLOOR SHEATHING SHALL BE LAID WITH THE GRAIN OF THE OUTER PLYS PERPENDICULAR TO THE FRAMING MEMBERS. SHALL BE CONTINUOUS OVER 2 JOIST BAYS MINIMUM AND END JOINTS SHALL BE JOINED OVER FRAMING AND STAGGERED. LEAVE A 1/8" GAP BETWEEN PANELS TO ALLOW FOR PANEL EXPANSION UNLESS RECOMMENDED OTHERWISE BY THE PANEL MANUF. REFER TO SPECIFIC DETAILS IN THE DRAWINGS FOR FURTHER PARAMETERS.

B. PLYWOOD OR OSB WALL SHEATHING MAY BE APPLIED VERTICALLY OR HORIZONTALLY. ALL END JOINTS BE JOINED OVER FRAMING AND STAGGERED.

4. BLOCKING:
A. ROOF: ALL ROOF SHEATHING SHALL BE BLOCKED UNLESS SPECIFICALLY ALLOWED ON PLANS, WHERE PERMITTED TO BE UNBLOCKED, ALL UNBLOCKED EDGES SHALL BE TONGUE AND GROOVE.
B. ALL FLOOR SHEATHING SHALL BE BLOCKED UNLESS SPECIFICALLY ALLOWED ON PLANS, WHERE PERMITTED TO BE UNBLOCKED, ALL UNBLOCKED EDGES SHALL BE TONGUE AND GROOVE.

C. WALLS: ALL SHEAR WALLS SHALL BE FULLY BLOCKED AT PLYWOOD EDGES.

5. FASTENERS
A. USE SHEATHING NAILS SAME GAUGE AS COMMON WIRE NAILS WITH LENGTHS AT LEAST EQUAL TO SHEATHING THICKNESS PLUS REQUIRED PENETRATION PER AWS SDPW'S TABLE 4.2A OR 4.3A (AS REQUIRED).
B. EQUIVALENT PNEUMATIC DRIVE NAILS MAY BE USED IF FASTENER MANUFACTURER HAS RECEIVED ICC OR IAPMO APPROVAL FOR THE INTENDED USE. FASTENERS TO BE SUBSTITUTED SHALL BE EQUIVALENT IN LATERAL AND WITHDRAWAL STRENGTH TO THE SIZE OF COMMON NAIL SPECIFIED.

C. USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOB SITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE APPROVED IN 5/8" PLYWOOD OR OSB SHEATHING. IF NAIL HEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.

D. TYPICAL NAILING SHALL BE 10d AT 6" O.C. AT ALL SUPPORTED EDGES AND OVER SHEAR WALLS, AND 10d AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS, UNLESS OTHERWISE NOTED. SEE PLANS AND REFER TO SHEAR WALL SCHEDULE.



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GENERAL NOTES

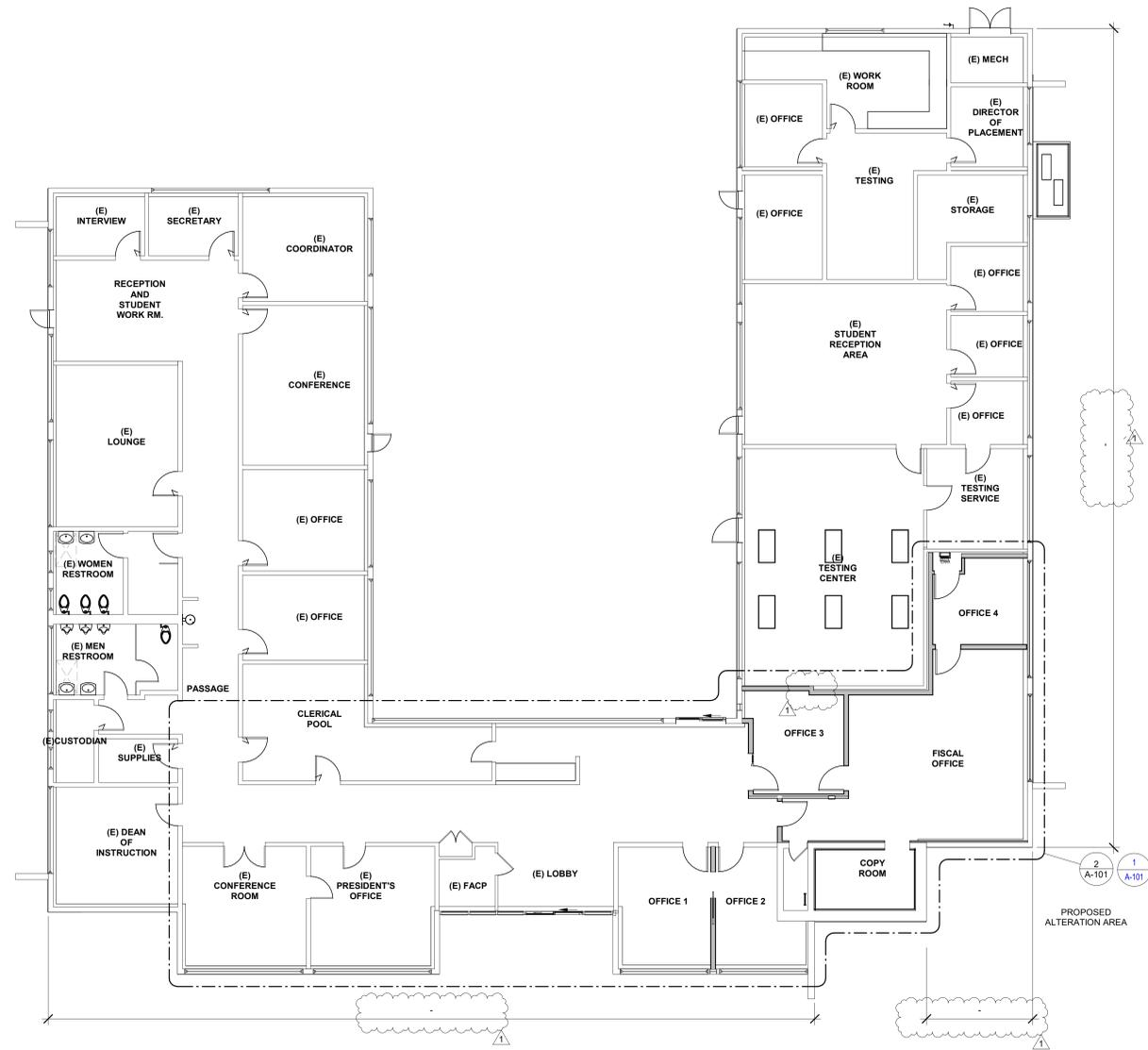
Table with columns: NO., REVISION, DATE. Includes a revision log and project information: PROJECT MANAGER, DRAWN BY, CHECKED BY, DATE, PROJECT NUMBER, SHEET.



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**1 ADMINISTRATION BUILDING FLOOR PLAN - OVERALL**  
A-301 | A-100 SCALE: 1/8" = 1'-0"

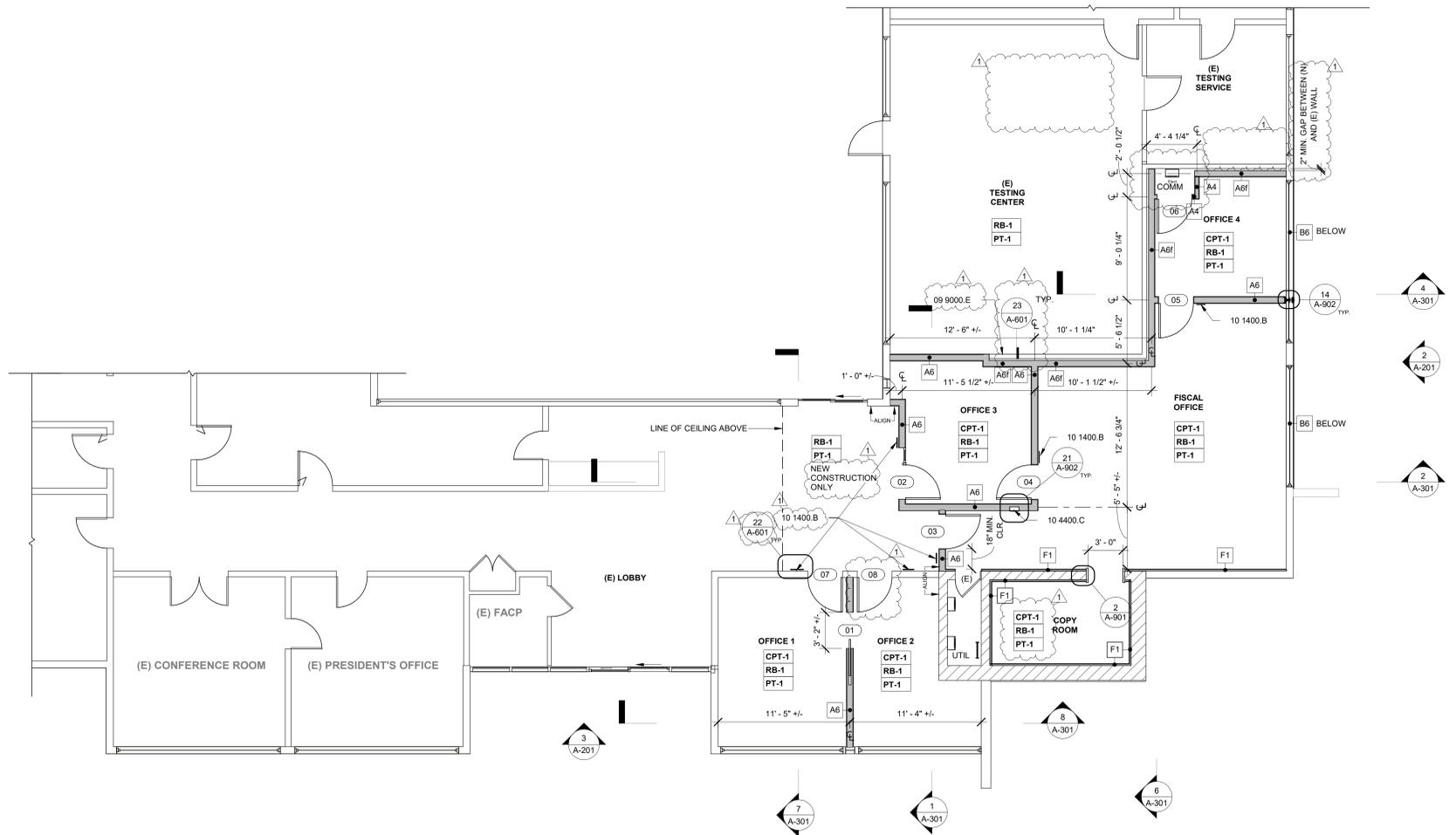
**FLOOR PLAN GENERAL NOTES**

1. SEE G-002 FOR SYMBOLS AND ABBREVIATIONS.
2. SEE MECHANICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4. SEE G-011 AND G-012 FOR GENERAL FRAMING, FASTENING, AND CONSTRUCTION NOTES

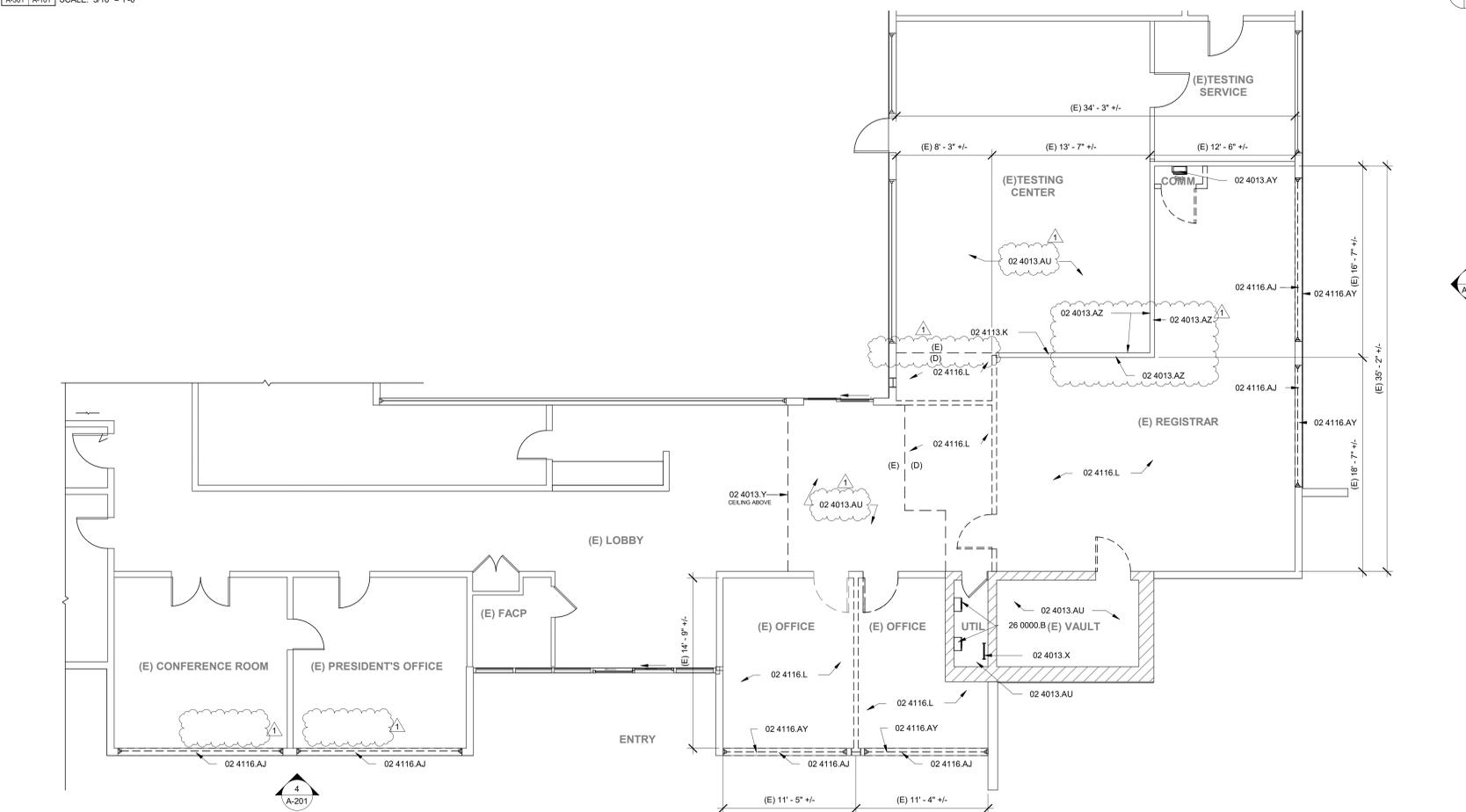
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| SHEET           | A-100        |

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**1 ENLARGED FLOOR PLAN - PROPOSED**  
 A-301 | A-101 SCALE: 3/16" = 1'-0"



**2 ENLARGED FLOOR PLAN - EXISTING/DEMO**  
 A-100 | A-101 SCALE: 3/16" = 1'-0"

**FLOOR PLAN GENERAL NOTES**

- SEE G-002 FOR SYMBOLS AND ABBREVIATIONS.
- SEE MECHANICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- SEE G-011 AND G-012 FOR GENERAL FRAMING, FASTENING, AND CONSTRUCTION NOTES.

**WALL TYPES**

|     |  |
|-----|--|
| A6  | 600S162-33 W/ AT 16" O.C. ONE LAYER 5/8" TYPE X GYPSUM WALL BOARD BOTH SIDES ACOUST BATT INSULATION INSIDE CAVITY, FULL HEIGHT                           |
| A6F | 600S162-33 W/ AT 16" O.C. ONE LAYER 5/8" TYPE X GYPSUM WALL BOARD ONE SIDE.  |
| A4  | 358S162-33 W/ AT 16" O.C. ONE LAYER 5/8" TYPE X GYPSUM WALL BOARD BOTH SIDES ACOUST BATT INSULATION INSIDE CAVITY, FULL HEIGHT                           |
| B6  | 2X6 WOOD STUDS AT 16" O.C. W/ ONE LAYER 5/8" TYPE X GYPSUM BOARD INTERIOR AND 7/8" CEMENT PLASTER / FLYWOOD EXTERIOR REBUILD AS REQUIRED, MATCH EXISTING |
| F1  | 150F125-33 AT 16" O.C. W/ ONE LAYER 5/8" TYPE X GYPSUM WALL BOARD  |

**WALL LEGEND**

- EXISTING WOOD STUD WALL TO REMAIN
- EXISTING BRICK WALL TO REMAIN
- EXISTING WOOD STUD WALL, REMOVE
- PROPOSED STUD WALL

**KEYNOTES**

- 02 4013 AU EXISTING FLOORING TO REMAIN
- 02 4013 AY EXISTING IT EQUIPMENT, TO REMAIN, PROVIDE TEMPORARY SUPPORT AND PROTECTION DURING CONSTRUCTION
- 02 4013 AZ EXISTING WALL FINISH, TO REMAIN
- 02 4013 X EXISTING ACCESS LADDER TO REMAIN
- 02 4013 Y EXISTING SOFFIT TO REMAIN
- 02 4113 K EXISTING RUBBER BASE TO BE REMOVED
- 02 4116 AJ EXISTING WINDOW REMOVE
- 02 4116 AY EXISTING CRIPPLE WALL REMOVE
- 02 4116 L EXISTING FLOORING REMOVE
- 09 9000 E PAINT ENTIRE WALL AND REPLACE RUBBER BASE ALONG ENTIRE LENGTH, COLOR TO BE FIELD VERIFIED
- 10 1400 B ROOM IDENTIFICATION SIGN
- 10 4400 C SEMI-RECESSED FIRE EXTINGUISHER CABINET WITH EXTINGUISHER, 2A10B C RATING
- 26 0000 B EXISTING ELECTRICAL PANEL, TO REMAIN

**FINISH PLAN GENERAL NOTES**

- REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- ALL FLOORING MATERIALS SHALL COMPLY WITH 2022 CBC SEC. 804.1.
- ALL WALL AND CEILING FINISHES SHALL COMPLY WITH 2022 CBC TABLE 803.13 FOR MAXIMUM FLAME SPREAD AND SMOKE DENSITY.

**FINISH REQUIREMENTS**

PER 2022 CBC 803.13 INTERIOR WALL AND CEILING FINISH SHALL HAVE A FLAME SPREAD INDEX NOT GREATER THAN THAT SPECIFIED IN TABLE 803.13 FOR THE GROUP AND LOCATION DESIGNATED. REFER TO 2022 CBC SEC. 803 FOR ADDITIONAL INFORMATION.

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY (CBC 2022 TABLE 803.13)

| GROUP | DEGREE OF FIRE PROTECTION: SPRINKLERED                 |   |                           |
|-------|--|---|---------------------------|
|       | INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGeways | CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS | ROOMS AND ENCLOSED SPACES |
| B     | A  | B   | C                         |

**CLASSIFICATIONS**

- CLASS A:
- FLAME SPREAD INDEX = 0-25
  - SMOKE DEVELOPED INDEX = 0-450
- CLASS B:
- FLAME SPREAD INDEX = 26-75
  - SMOKE DEVELOPED INDEX = 0-450
- CLASS C:
- FLAME SPREAD INDEX = 76-200
  - SMOKE DEVELOPED INDEX = 0-450

**ROOM FINISH SCHEDULE**

- CPT-1 CARPET TILE
- RB-1 RESILIENT BASE MATCH EXISTING SHAPE AND COLOR, VERIFY IN FIELD
- PT-1 INTERIOR FIELD COLOR, DUNN-EDWARDS SWISS COFFEE DEW341
- ACT-1 ACOUSTICAL CEILING TILE

GENERAL NOTES ON FINISHES:  
 1. REFER TO PAINT SPECS FOR SPECIFIC PREP AND FINISH REQUIREMENTS ACCORDING TO SUBSTRATES



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 FLOOR PLANS

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| CHECKED BY      | DS                 |
| DATE            | 06/20/2025         |
| PROJECT NUMBER  | 3425-01-ED24       |
| SHEET           | A-101              |

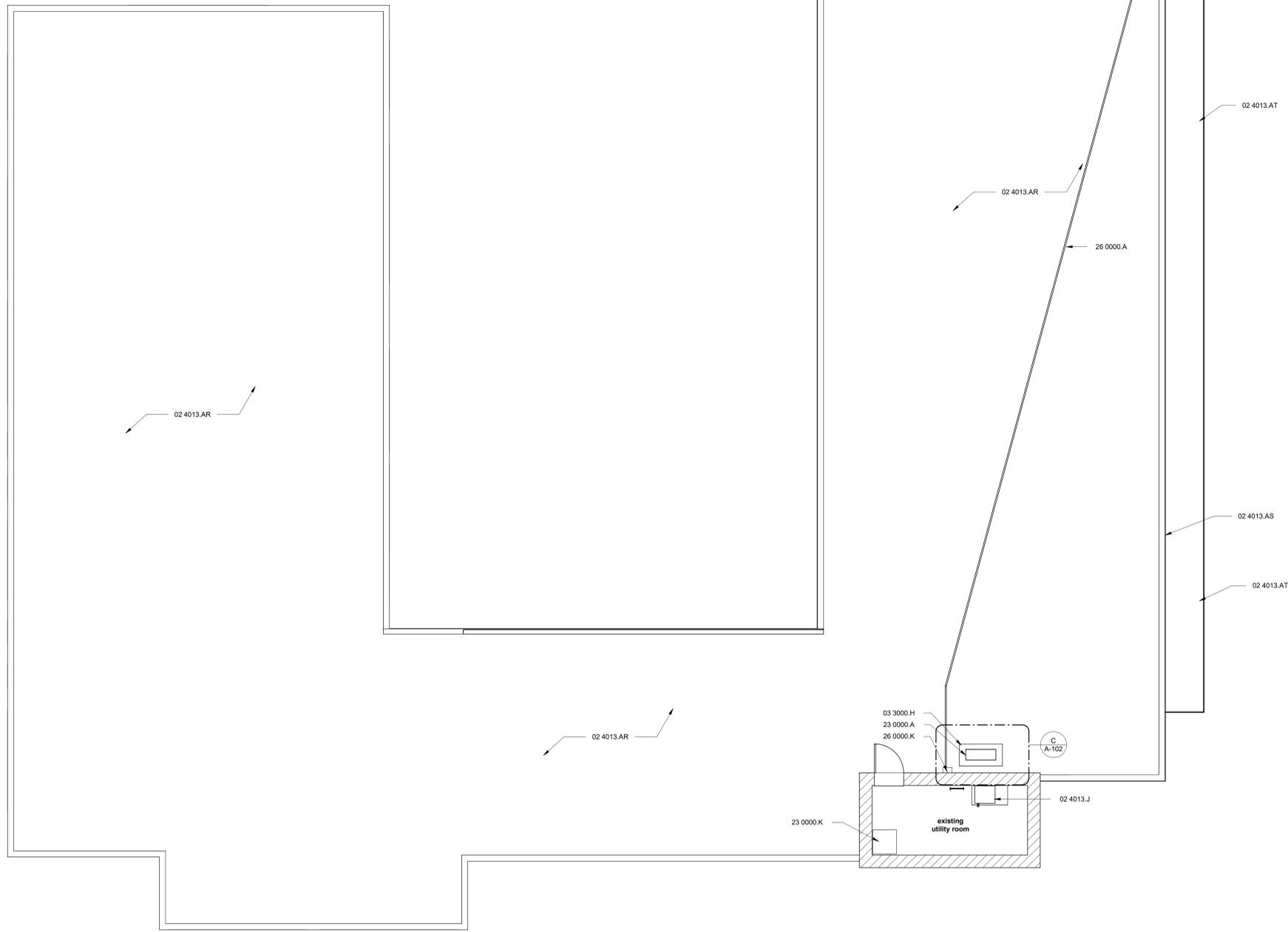


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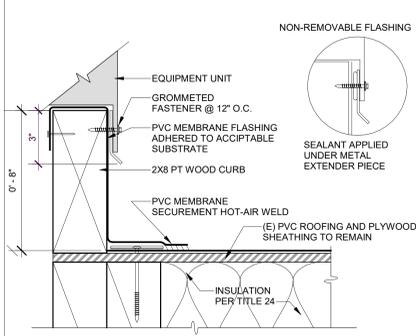
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**ROOF PLAN**



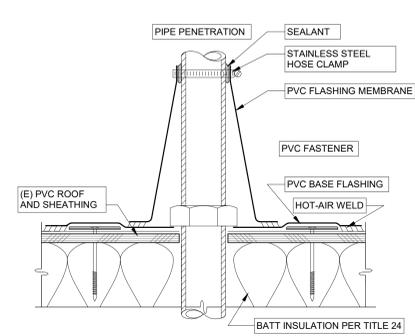
**KEYNOTES**

- 02 4013.AR EXISTING PVC ROOF TO REMAIN. PROTECT IN PLACE.
- 02 4013.AS EXISTING PARAPET WALL TO REMAIN. PROTECT IN PLACE.
- 02 4013.AT EXISTING AWNING ROOF BELOW TO REMAIN. PROTECT IN PLACE.
- 02 4013.J EXISTING EXISTING MECHANICAL EQUIPMENT TO REMAIN.
- 03 3000.H MECHANICAL EQUIPMENT PAD - SEE MECHANICAL DRAWINGS.
- 09 2400.C PATCH/REPAIR/SEAL/PAINT ELECTRICAL CONDUIT PENETRATION.
- 23 0000.A INTERIOR MECHANICAL EQUIPMENT. REFER TO MECHANICAL.
- 23 0000.K (E) MECHANICAL ACCESS SCUTTLE, TO REMAIN.
- 26 0000.A ELECTRICAL CONDUIT, SUPPORT WITH DURABLOCK AT 8'-0" O.C.
- 26 0000.K ELECTRICAL DISCONNECT SWITCH.

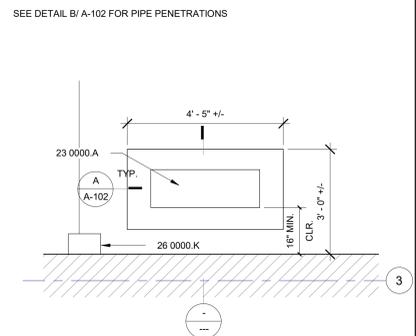
**1 ROOF PLAN**  
A-102 SCALE: 3/16" = 1'-0"



**A CURB FLASHING**  
SCALE: 3" = 1'-0"



**B CONE FLASHING**  
SCALE: 3" = 1'-0"



**C CONDENSER UNIT PLAN**  
SCALE: 1/2" = 1'-0"

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 SHEET: A-102

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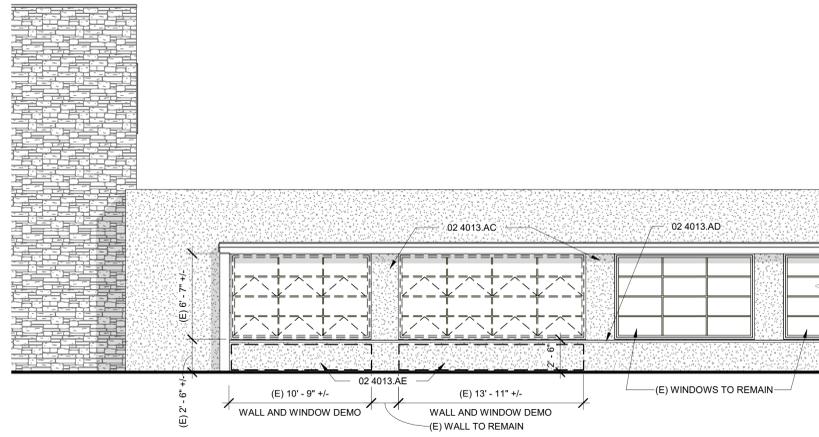




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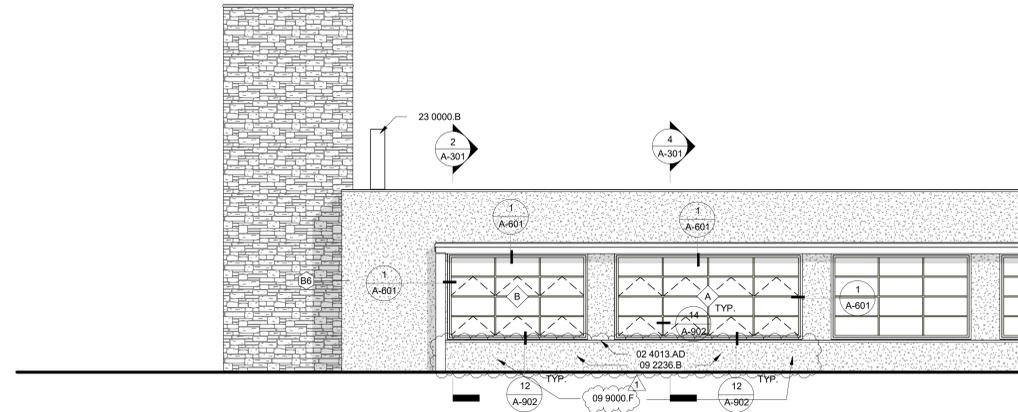
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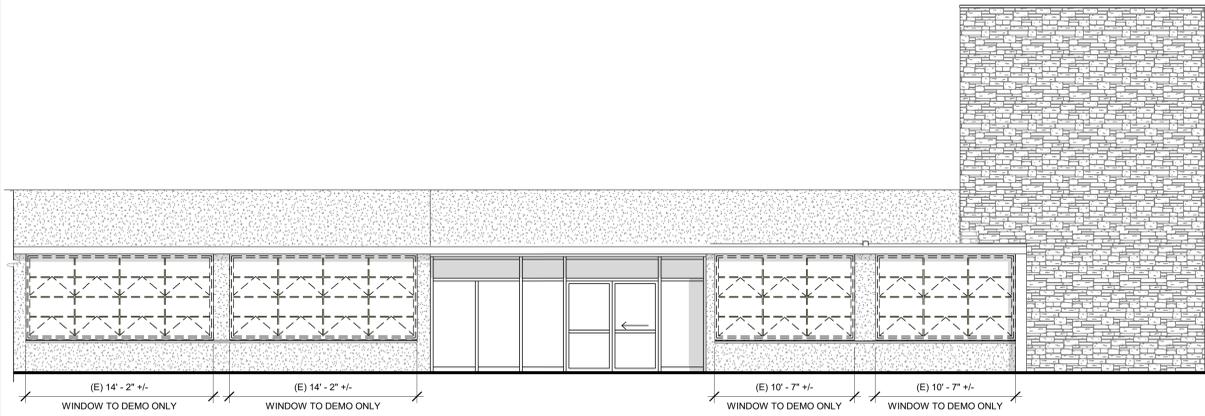
**1 EAST ELEVATION EXISTING/DEMO**

A-101 | A-201 SCALE: 3/16" = 1'-0"



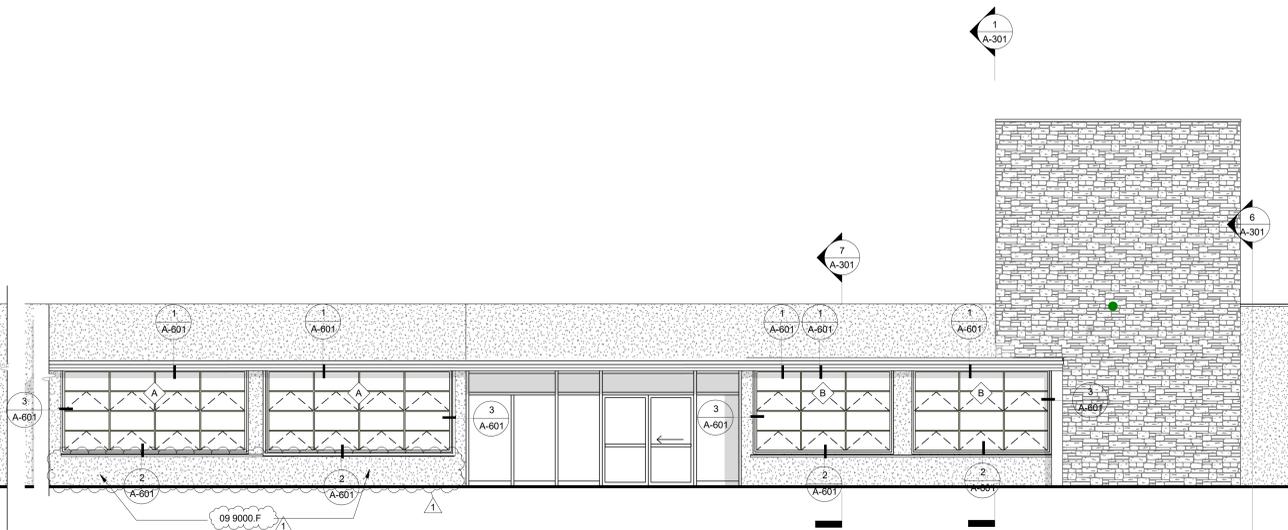
**2 EAST ELEVATION PROPOSED**

A-101 | A-201 SCALE: 3/16" = 1'-0"



**4 SOUTH ELEVATION EXISTING/DEMO**

A-101 | A-201 SCALE: 3/16" = 1'-0"



**3 SOUTH ELEVATION PROPOSED**

A-101 | A-201 SCALE: 3/16" = 1'-0"

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ALTERATION  
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BUILDING ELEVATIONS

**FINISH SCHEDULE**

XPT-1. EXTERIOR PAINT, DUNN-EDWARDS BUNGALOW TAUPE, DE172  
XPT-2. EXTERIOR TRIM COLOR DUNN-EDWARDS BIG STONE BEACH, DE132

**GENERAL NOTES ON FINISHES:**  
1 REFER TO PAINT SPECS FOR SPECIFIC PREP AND FINISH REQUIREMENTS ACCORDING TO SUBSTRATES

**WALL TYPES**

B6 5 1/2" WOOD STUDS REBUILD AS REQUIRED, MATCH EXISTING

**ELEVATION GENERAL NOTES**

- REFER TO GENERAL NOTES SHEET G-002 FOR SYMBOLS AND ABBREVIATIONS
- FRAMING ELEVATIONS, INCLUDING FLOOR PLATES AND FLOOR LEVEL ELEVATIONS ARE MEASURED FROM BUILDING FINISH FLOOR, U.N.O.
- SEE DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS
- REFER TO ROOF PLAN FOR ROOF PITCH AND OVERHANGS, FASCIA PER DETAILS
- SEE ROOF PLAN FOR APPROXIMATE DOWNSPOUT LOCATIONS, U.N.O.
- REFER TO DOOR AND WINDOW SCHEDULES AND TYPES FOR DOOR AND WINDOW INFORMATION
- SEE ELECTRICAL DRAWINGS FOR EXTERIOR LIGHTING
- SEE MECHANICAL DRAWINGS FOR GRILLES AND LOUVERS, PAINT TO MATCH ADJACENT FINISH
- CONTRACTOR TO VERIFY COLOR SCHEME WITH OWNER BEFORE PERFORMING THE WORK
- PATCH REPAIR AND PAINT PLASTER AROUND NEW WINDOWS TO MATCH EXISTING ADJACENT FINISHES

**KEYNOTES**

- 02 4013.AC EXISTING PLASTER FINISH TO REMAIN, PATCH/REPAIR/PAINT
- 02 4013.AD EXISTING PLASTER PLANT-ON FURRING AND PLASTERED SILL TO REMAIN
- 02 4013.AE EXISTING PLASTER, REMOVE PLASTER SUFFICIENTLY TO ALLOW FEELING BACK OF WRB FOR LAPPING OVER WINDOW FLASHING, ADD SAWP MEMB.
- 09 2236.B PLASTER FINISH, MATCH EXISTING ADJACENT WALL TEXTURE
- 09 9000.F RE-PAINT AS NECESSARY, MATCH EXISTING COLOR
- 23 0000.B MECHANICAL UNIT CONDENSER, REFER TO MECHANICAL

**LEGEND**

- ? MATERIAL TAG, REFER TO MATERIAL SCHEDULE FOR PRODUCT INFORMATION.
- WALL FINISH.

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SHEET: A-201



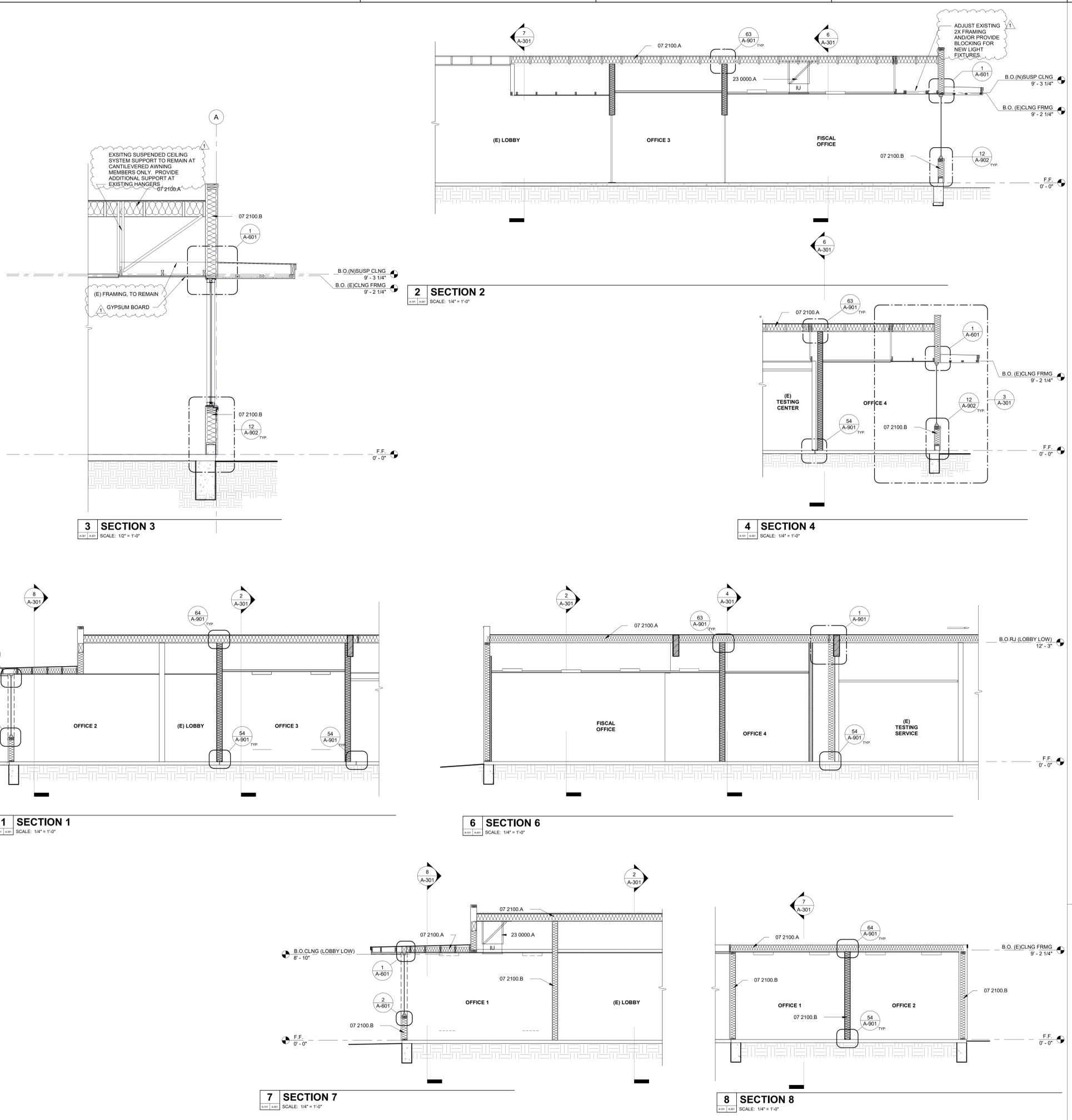
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BUILDING SECTIONS



**KEYNOTES**

- 07 2100.A ROOF BATT INSULATION, R-30 MIN. PER SPECIFICATIONS.
- 07 2100.B EXTERIOR WALL BATT INSULATION, R-20 MIN. PER SPECIFICATIONS.
- 23 0000.A INTERIOR MECHANICAL EQUIPMENT. REFER TO MECHANICAL.

**SECTIONS GENERAL NOTES**

1. THE PURPOSE OF THESE DRAWINGS IS TO SHOW CONSTRUCTION MATERIALS/ASSEMBLIES. FOR SPECIFIC SIZES AND DETAILS REFER TO ARCHITECTURAL PLANS, ELEVATIONS, DETAILS, AND STRUCTURAL PLANS.
2. INSULATION: REFER TO TITLE 24 REPORT AND "INSULATION" NOTES ON SHEET FOR ADDITIONAL RATINGS, REQUIREMENTS, AND INFORMATION. REFER TO FIREBLOCKING/DRAFTSTOPPING NOTES ON SHEET G-101.
3. WOOD SHALL BE PROTECTED FROM DECAY AND TERMITES AS REQUIRED PER 2022 CBC SECTION 2304.12
4. FOUNDATION SILLS TO BE NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD. 2022 CBC SECTION 2304.12.2
5. PENETRATIONS OF FIRE-RESISTIVE WALLS, FLOOR/CEILINGS SHALL BE PROTECTED AS REQUIRED PER 2022 CBC SECTIONS 714.3 & 714.4.
6. WALL ASSEMBLIES TO BE PER FLOOR PLAN.
7. DOORS, WINDOWS AND STOREFRONT SYSTEMS TO BE PER APPLICABLE SCHEDULE. REFER TO FLOOR PLANS FOR IDENTIFICATION.

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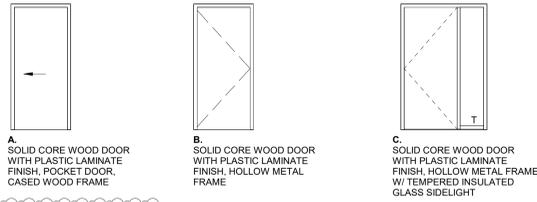
  

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| SHEET           | A-301        |

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## DOOR TYPES LEGEND



**A.** SOLID CORE WOOD DOOR WITH PLASTIC LAMINATE FINISH, POCKET DOOR, CASED WOOD FRAME

**B.** SOLID CORE WOOD DOOR WITH PLASTIC LAMINATE FINISH, HOLLOW METAL FRAME

**C.** SOLID CORE WOOD DOOR WITH PLASTIC LAMINATE FINISH, HOLLOW METAL FRAME W/ TEMPERED INSULATED GLASS SIDELIGHT

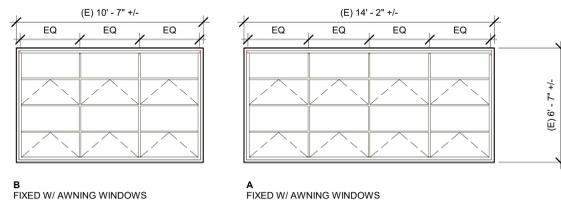
LAMINATE DOOR COLOR TO BE SELECTED IN THE FIELD FROM FULL RANGE OF MFR SELECTIONS

PT. 2. PAINT DOOR FRAMES INTERIOR ACCENT COLOR DUNN EDWARDS CHOCOLATE CHUNK DE6070

## DOOR SCHEDULE

| NO. | TYPE | DESCRIPTION              | DOOR  |        | THICKNESS | Hardware | FIRE RATING | DETAIL   |          | SILL | REMARKS |
|-----|------|--------------------------|-------|--------|-----------|----------|-------------|----------|----------|------|---------|
|     |      |                          | WIDTH | HEIGHT |           |          |             | HEAD     | JAMB     |      |         |
| 01  | A    | POCKET DOOR              | 3'-2" | 7'-0"  | 0'-1 3/4" | 1        | NONE        | A-601/11 | A-601/12 |      |         |
| 02  | C    | SINGLE FLUSH W/ SIDELITE | 3'-0" | 7'-0"  | 0'-1 3/4" | 2        | NONE        | A-601/11 | A-601/12 |      |         |
| 03  | B    | SINGLE FLUSH             | 3'-0" | 7'-0"  | 0'-1 3/4" | 2        | NONE        | A-601/11 | A-601/12 |      |         |
| 04  | B    | SINGLE FLUSH             | 3'-0" | 7'-0"  | 0'-1 3/4" | 2        | NONE        | A-601/11 | A-601/12 |      |         |
| 05  | B    | SINGLE FLUSH             | 3'-0" | 7'-0"  | 0'-1 3/4" | 2        | NONE        | A-601/11 | A-601/12 |      |         |
| 06  | B    | SINGLE FLUSH             | 3'-0" | 7'-0"  | 0'-1 3/4" | 3        | NONE        | A-601/11 | A-601/12 |      |         |
| 07  | B    | SINGLE FLUSH             | 3'-0" | 7'-0"  | 0'-1 3/4" | 2        | NONE        | A-601/11 | A-601/12 |      |         |
| 08  | B    | SINGLE FLUSH             | 3'-0" | 7'-0"  | 0'-1 3/4" | 2        | NONE        | A-601/11 | A-601/12 |      |         |

## WINDOW TYPES LEGEND



**B.** FIXED W/ AWNING WINDOWS

**A.** FIXED W/ AWNING WINDOWS

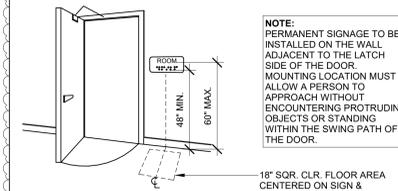
NOTE: ALL GLAZING TO BE DUAL GLAZED AND TEMPERED

## WINDOW SCHEDULE

| TYPE | SIZE   |           | HEAD HEIGHT | DETAILS  |          |          | REMARKS |
|------|--------|-----------|-------------|----------|----------|----------|---------|
|      | WIDTH  | HEIGHT    |             | HEAD     | JAMB     | SILL     |         |
| A    | 14'-2" | 6'-6 1/2" | 9'-0 1/2"   | 1/ A-601 | 3/ A-601 | 2/ A-601 |         |
| B    | 10'-7" | 6'-6 1/2" | 9'-0 1/2"   | 1/ A-601 | 3/ A-601 | 2/ A-601 |         |

## DOOR GENERAL NOTES

- REFER TO FLOOR PLANS FOR DOOR LOCATIONS.
- CONTRACTOR TO VERIFY EXACT ROUGH OPENING SIZES WITH DOOR MANUFACTURER SPECIFICATIONS PRIOR TO FABRICATION OF ROUGH OPENINGS.
- CONTRACTOR TO VERIFY ACTUAL DOOR SIZES TO FIT FINISH OPENING PRIOR TO FABRICATION OF DOOR AND FINISH OPENING.
- REFER TO DOOR TYPES LEGEND FOR GLAZING.
- INSTALL PER MANUFACTURERS WRITTEN INSTRUCTIONS



### INSTALLATION, HEIGHT AND LOCATION

NOTE: PERMANENT SIGNAGE TO BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. MOUNTING LOCATION MUST ALLOW A PERSON TO APPROACH WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING PATH OF THE DOOR.

18" SQ. CLR. FLOOR AREA CENTERED ON SIGN & CLEAR OF DOOR SWING

DEPTH: RAISED 1/32" MIN. ABOVE BACKGROUND

CHARACTERS: UPPER CASE, SANSERIF, NOT ITALIC. WIDTH OF UPPER CASE LETTER "O" SHALL BE 60% MIN. TO 110% MAX. OF UPPER CASE LETTER "I"

HEIGHT: 5/8" MIN. TO 2" MAX.

STROKE: THICKNESS OF UPPER CASE LETTER "I" SHALL BE 15% MAX. HEIGHT OF CHARACTER

3/8" MIN. 1/2" MAX. CORRESPONDING GRADE II BRAILLE

234

### RAISED CHARACTERS

18

1/8" MIN. TO 4 TIMES STROKE WIDTH MAX. RECTANGULAR

RECTANGULAR

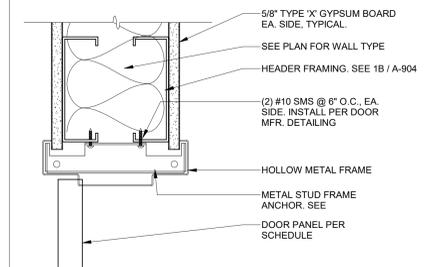
74

1/16" MIN. TO 4 TIMES STROKE WIDTH MAX.

NON RECTANGULAR

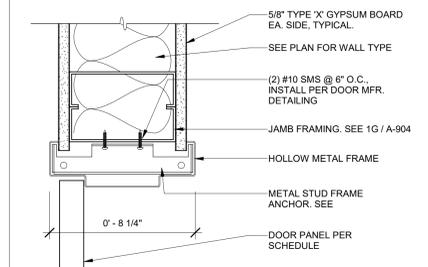
### CHARACTER SPACING

(REF. 2012 CBC 11B-701)



### 11 INT. METAL DOOR HEAD

SCALE: 3" = 1'-0"



### 12 INT. METAL DOOR JAMB

SCALE: 3" = 1'-0"

## DOOR REMARKS

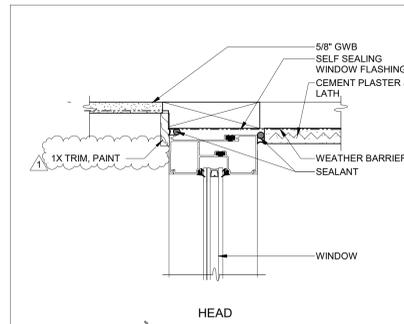
- EGRESS DOOR.
- EQUIPPED W/PANIC HARDWARE.
- INCLUDES SAFETY GLAZING.
- FIRE-RATED DOOR ASSEMBLY. VISION PANELS OR LITES TO RECEIVE WIRE GLASS.
- LOUVERED DOOR.
- KICK-PLATE PROVIDED.

## WINDOW GENERAL NOTES

- REFER TO GENERAL NOTES ON SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
- REFER TO FLOOR PLANS FOR WINDOW LOCATIONS.
- CONTRACTOR TO VERIFY EXACT ROUGH OPENING SIZES WITH WINDOW MANUFACTURER SPECIFICATIONS PRIOR TO FABRICATION OF ROUGH OPENINGS.
- CONTRACTOR TO VERIFY ACTUAL WINDOW SIZES TO FIT FINISH OPENING PRIOR TO FABRICATION OF WINDOW AND FINISH OPENING.
- HEAD HEIGHT MEASURED FROM FF UNLESS NOTED OTHERWISE.
- REFER TO ENERGY COMPLIANCE REPORTS FOR U-FACTOR, SHGC AND ADDITIONAL WINDOW REQUIREMENTS.
- ALL GLAZING IS DOUBLE PANE UNLESS OTHERWISE NOTED.
- PROVIDE SHOP DRAWINGS FOR ALL WINDOW UNITS
- REFER TO WINDOW TYPES LEGEND FOR GLAZING
- REFER TO WINDOW SCHEDULE AND WINDOW TYPES LEGEND FOR FURTHER INFORMATION
- STOREFRONT SECTIONS ARE 2" AND CURTAINWALL SECTIONS ARE 2-1/2". UNO. REFER TO STOREFRONT TYPES LEGEND FOR FURTHER INFORMATION.
- WINDOWS BETWEEN CONDITIONED AND UNCONDITIONED SPACES SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED OR OTHERWISE SEALED.
- SAFETY GLAZING NOTATED WITH "T".

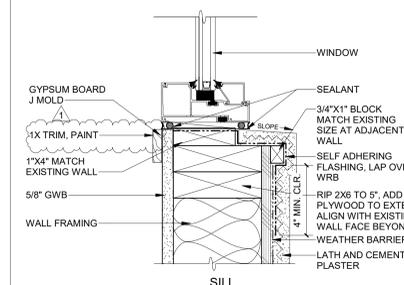
## WINDOW REMARKS

- INCLUDES SAFETY GLAZING.
- EGRESS WINDOW. MUST MEET CBC REQUIREMENTS.



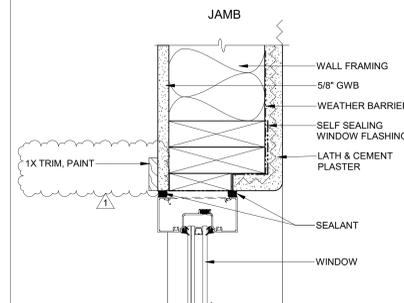
### 1 STORE FRONT HEAD DETAIL

SCALE: 3" = 1'-0"



### 2 STORE FRONT SILL DETAIL

SCALE: 3" = 1'-0"



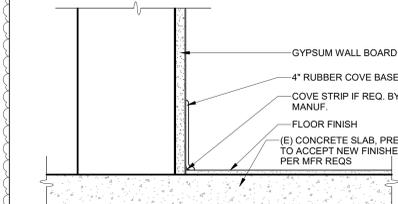
### 3 STORE FRONT JAMB DETAIL

SCALE: 3" = 1'-0"

NOTE: ALL WINDOW FLASHING SHALL COMPLY WITH MANUFACTURER/INDUSTRY STANDARDS AAMA 2400-02

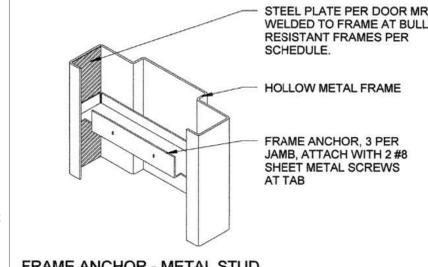
### 22 ROOM SIGN

SCALE: 3" = 1'-0"



### 23 RUBBER COVE BASE

SCALE: 3" = 1'-0"



### 13 FRAME ANCHOR

SCALE: 1" = 1'-0"



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CONSULTING ENGINEER

VENTURA COLLEGE ADMIN BLDG ALTERATION

4667 TELEGRAPH RD., VENTURA, CA 93003

DOOR AND WINDOW SCHEDULES

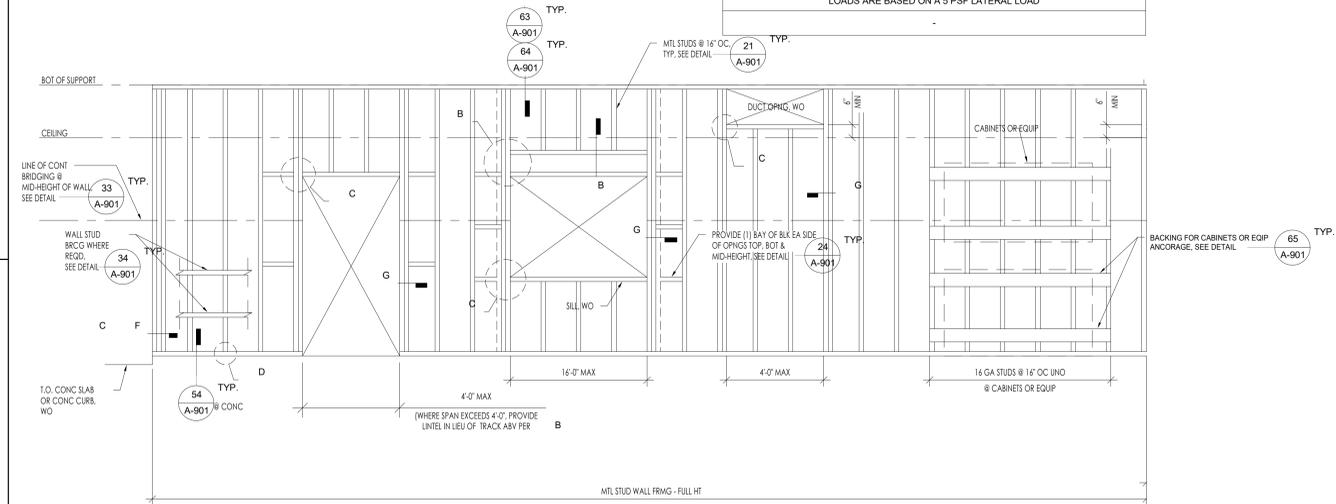
| NO. | REVISION    | DATE     |
|-----|-------------|----------|
| 1   | ADDENDUM #1 | 08/20/25 |
| 2   |             |          |
| 3   |             |          |
| 4   |             |          |
| 5   |             |          |

PROJECT MANAGER  
MHT  
DRAWN BY  
GK/CCS/DD/JM/SL DS  
DATE  
06/20/2025  
PROJECT NUMBER  
3425-01-ED24  
SHEET

A-601

| LOCATION  | DESIGNATION | KSI | SPACING                 | MAX. HEIGHT |
|-----------|-------------|-----|-------------------------|-------------|
| TYP. STUD | 6005162-33  | 33  | 16" O.C. (STUD SPACING) | 10' - 0"    |

THIS STUD TABLE IS BASED ON SSMA TABLES AND ICC-ES EVALUATION REPORT ERS-3064P  
 HEIGHTS ARE BASED ON A DEFLECTION LIMIT OF L/240  
 LOADS ARE BASED ON A 5 PSF LATERAL LOAD



| STUD SCHEDULE |       |       |                         |                      |                             |                 |            |
|---------------|-------|-------|-------------------------|----------------------|-----------------------------|-----------------|------------|
| DEPTH         | GAUGE | B     | AREA (IN <sup>2</sup> ) | S (IN <sup>2</sup> ) | MAX SPACING OF STUD BRACING | SSMA DESIGNATOR |            |
| 2 1/2"        | 20    | 1.58" | 223                     | 236                  | 186                         | 4'-0"           | 2505162-33 |
|               | 18    | 1.58" | 289                     | 302                  | 242                         | 4'-0"           | 2505162-43 |
|               | 16    | 1.58" | 358                     | 370                  | 296                         | 4'-0"           | 2505162-54 |
| 4"            | 20    | 1.58" | 275                     | 492                  | 346                         | 4'-0"           | 4005162-33 |
|               | 18    | 1.58" | 375                     | 492                  | 446                         | 4'-0"           | 4005162-43 |
|               | 16    | 1.58" | 443                     | 1096                 | 549                         | 4'-0"           | 4005162-54 |
| 6"            | 20    | 1.58" | 344                     | 1793                 | 598                         | 4'-0"           | 6005162-33 |
|               | 18    | 1.58" | 447                     | 2316                 | 772                         | 4'-0"           | 6005162-43 |
|               | 16    | 1.58" | 556                     | 2860                 | 953                         | 4'-0"           | 6005162-54 |
| 8"            | 20    | 1.58" | 413                     | 3362                 | 896                         | 4'-0"           | 8005162-33 |
|               | 18    | 1.58" | 470                     | 5736                 | 1434                        | 4'-0"           | 8005162-43 |
|               | 14    | 2"    | 0.907                   | 8,140                | 2,035                       | 4'-0"           | 8005200-68 |
| 10"           | 16    | 2"    | 859                     | 11,278               | 2,256                       | 4'-0"           | 2505200-54 |
|               | 12    | 14    | 2"                      | 1,192                | 21,947                      | 3,658           | 4'-0"      |

| TRACK SCHEDULE |       |        |                         |                      |                 |            |
|----------------|-------|--------|-------------------------|----------------------|-----------------|------------|
| DEPTH          | GAUGE | B      | AREA (IN <sup>2</sup> ) | S (IN <sup>2</sup> ) | SSMA DESIGNATOR |            |
| 2 1/2"         | 20    | 1.1/2" | 190                     | 221                  | 167             | 2507150-33 |
|                | 18    | 1.1/2" | 248                     | 289                  | 217             | 2507150-43 |
|                | 16    | 1.1/2" | 311                     | 368                  | 273             | 2507150-54 |
| 4"             | 20    | 1.1/2" | 242                     | 422                  | 300             | 4007150-33 |
|                | 18    | 1.1/2" | 315                     | 811                  | 390             | 4007150-43 |
|                | 16    | 1.1/2" | 396                     | 1,025                | 489             | 4007150-54 |
| 6"             | 20    | 1.1/2" | 311                     | 1,590                | 517             | 6007150-33 |
|                | 18    | 1.1/2" | 405                     | 2,072                | 673             | 6007150-43 |
|                | 16    | 1.1/2" | 509                     | 2,611                | 843             | 6007150-54 |
| 8"             | 20    | 1.1/2" | 380                     | 3,180                | 781             | 8007150-33 |
|                | 18    | 1.1/2" | 422                     | 5,214                | 1,272           | 8007150-43 |
|                | 14    | 1.1/2" | 563                     | 6,574                | 1,599           | 8007150-68 |
| 10"            | 16    | 1.1/2" | 735                     | 9,061                | 1,777           | 2507150-54 |
|                | 12    | 14     | 1.1/2"                  | 1,088                | 18,148          | 2,963      |

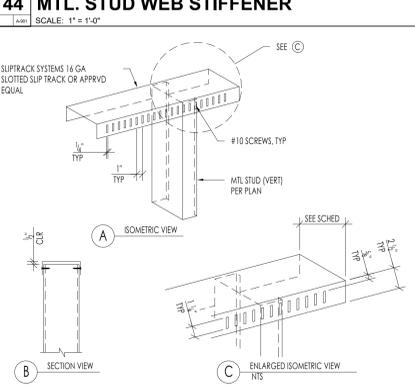
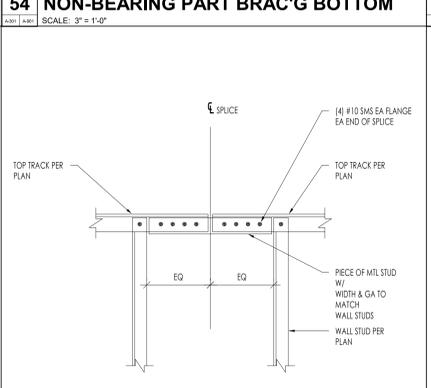
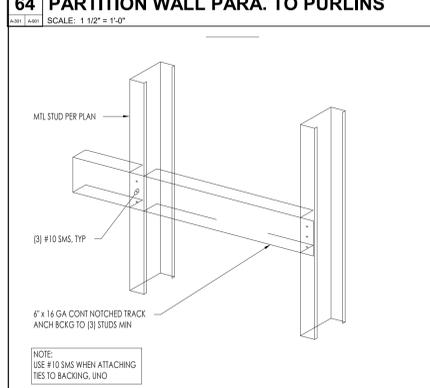
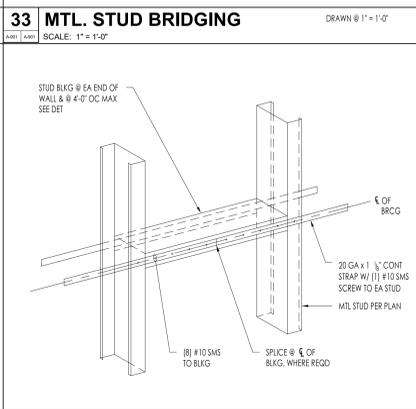
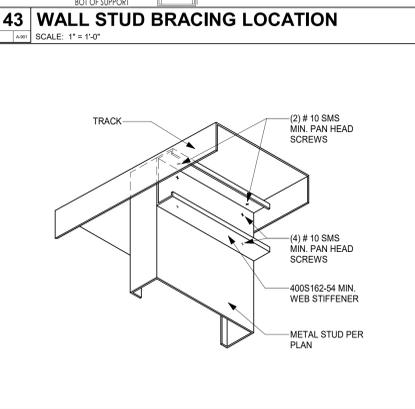
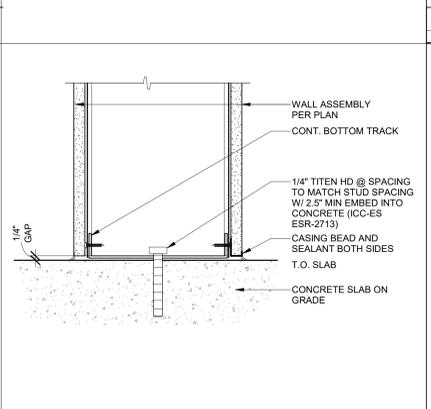
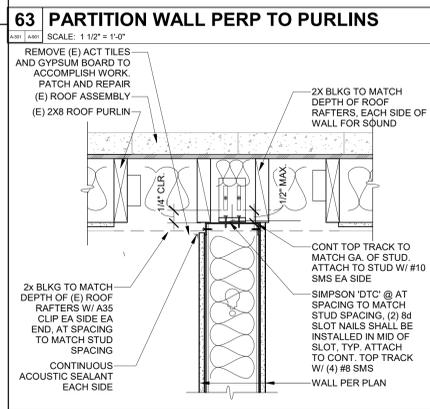
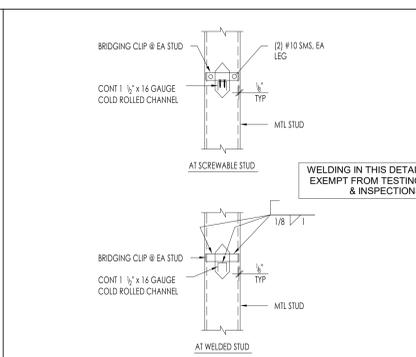
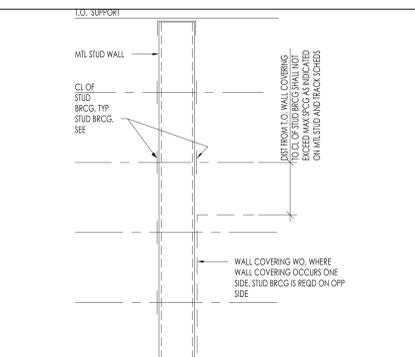
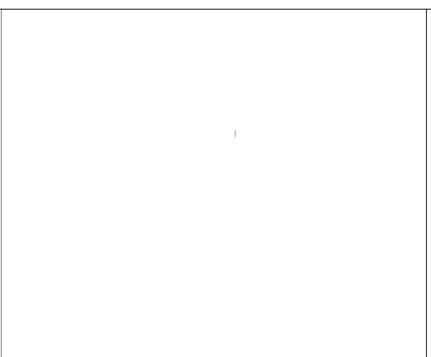
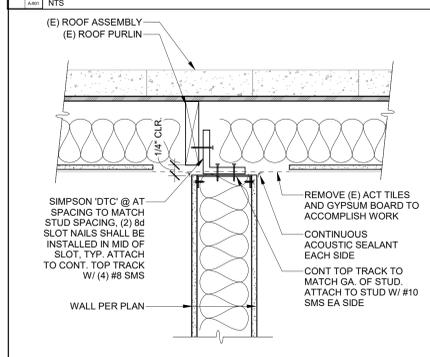
- NOTES:  
 1. FOR SIZE AND GAUGE OF STUDS, SEE ADJACENT TABLE ON DETAIL 62/ A-901  
 2. DIMENSIONS, PROPERTIES AND TYPES NOTED ARE BASED ON METAL STUDS AND TRACKS BY STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) ICSD NO. 49-3 UNO.

**21 METAL STUD TABLE AND SCHEDULE**

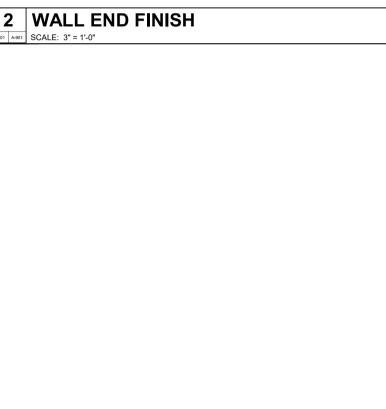
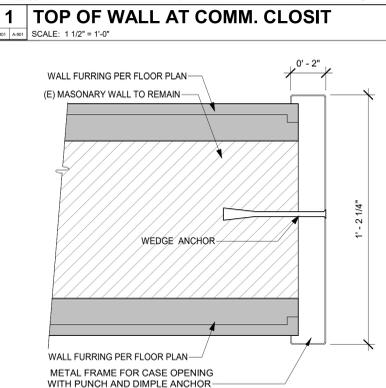
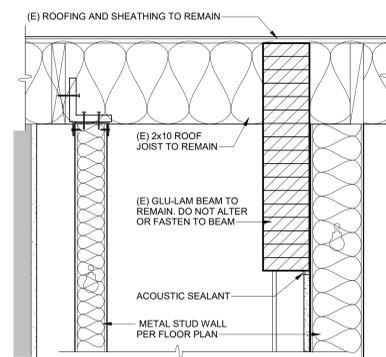


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**62 METAL STUD FRAMING ELEVATION**



**21 METAL STUD TABLE AND SCHEDULE**



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VENTURA COLLEGE ADMIN BLDG  
 ALTERATION  
 4667 TELEGRAPH RD., VENTURA, CA 93003  
 TYPICAL INTERIOR DETAILS

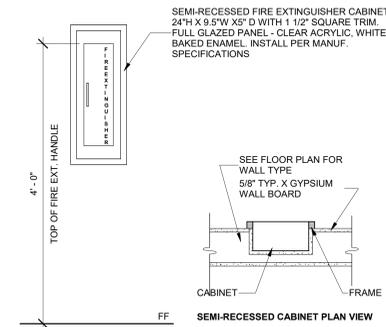
| NO. | REVISION | DATE |
|-----|----------|------|
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|     |          |      |
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PROJECT MANAGER: M/H  
 DRAWN BY: GK/CCS/DD/JM/SL/DS  
 DATE: 06/20/2025  
 PROJECT NUMBER: 3425-01-ED24  
 SHEET: A-901

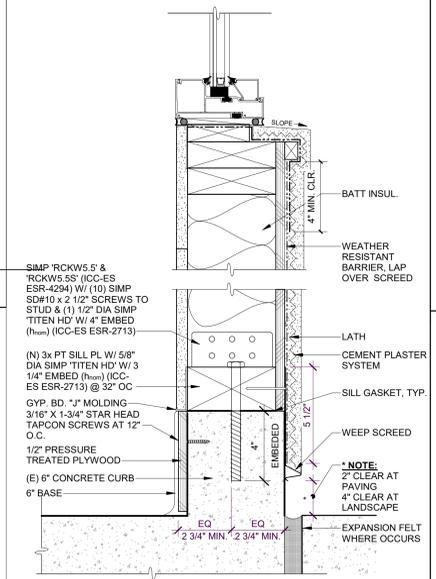
8/20/2025 5:53:57 PM  
 Autodesk Docs/3425 - Ventura College Admin Building Alteration3425 - Ventura College Admin Building.rvt

100% CD

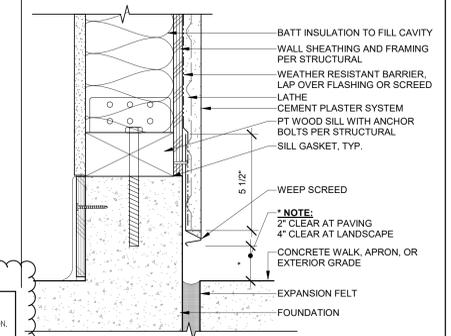
8/10/2025 6:50:39 AM Autodesk Docs/15425 - Ventura College Admin Building Alteration3425 - Ventura\_College\_Admin\_Building.rvt



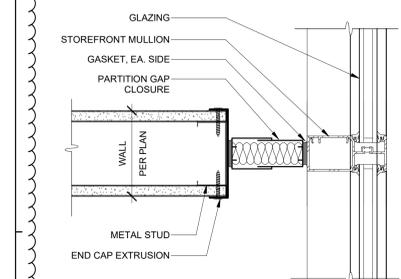
**21 FIRE EXTINGUISHER CABINET**  
SCALE: 1" = 1'-0"



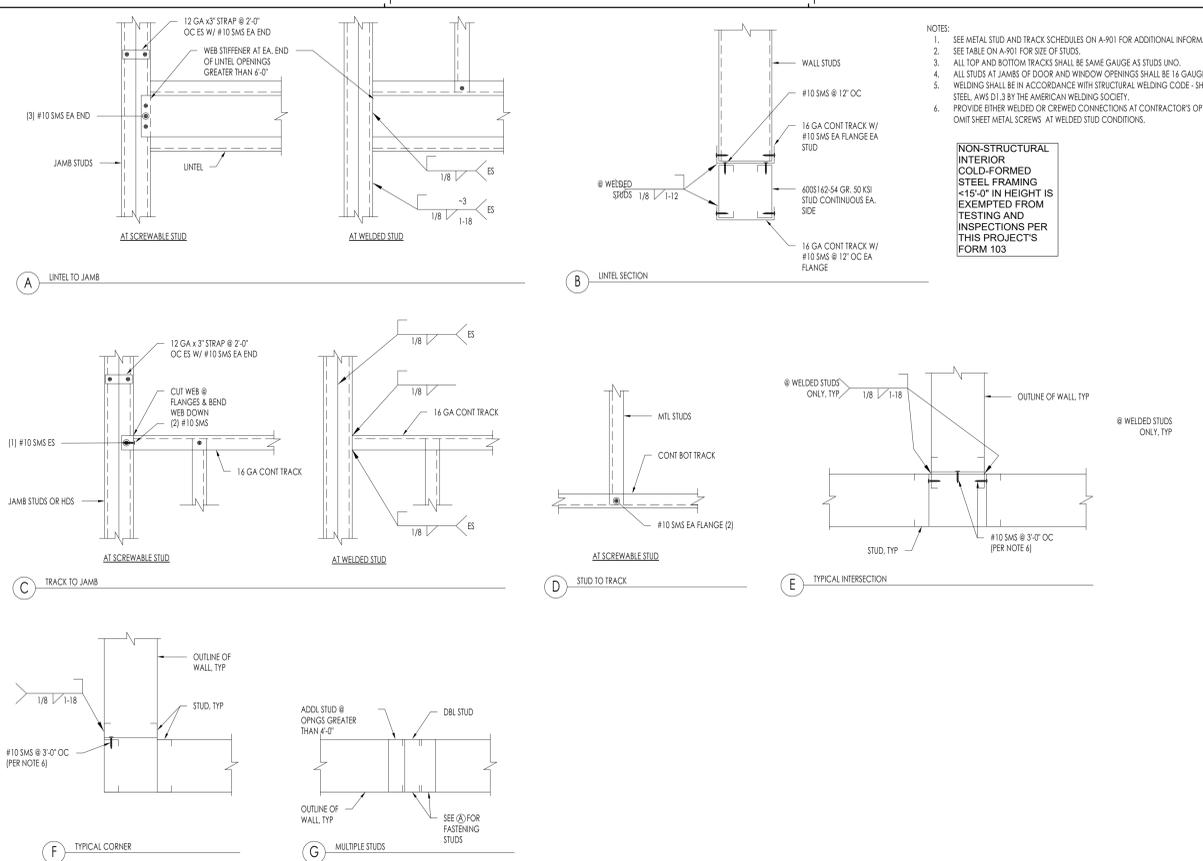
**12 WALL UNDER REPLACED WINDOW**  
SCALE: 3" = 1'-0"



**13 WEEP SCREED**  
SCALE: 3" = 1'-0"



**14 INTERIOR WALL END AT STOREFRONT**  
SCALE: 3" = 1'-0"



**1 METAL STUD WALL FRAMING**  
SCALE: NTS



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CONSULTING ENGINEER

**VENTURA COLLEGE ADMIN BLDG ALTERATION**  
 4667 TELEGRAPH RD., VENTURA, CA 93003  
 DETAILS

| NO. | REVISION | DATE |
|-----|----------|------|
|     |          |      |
|     |          |      |
|     |          |      |
|     |          |      |

|                 |                    |
|-----------------|--------------------|
| PROJECT MANAGER | MHT                |
| DRAWN BY        | CK/CCS/DD/JM/SL DS |
| CHECKED BY      | DS                 |
| DATE            | 06/20/2025         |
| PROJECT NUMBER  | 3425-01-ED24       |
| SHEET           | A-902              |

100% CD

IR 25-2 SUSPENDED LAY-IN PANEL CEILING: 2022 CBC

Disciplines: Structural History: Revised 11/03/23 Under 2022 CBC Last Revised 03/18/22 Under 2019 CBC Original Issue 05/18/11

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

PURPOSE This Interpretation of Regulations (IR) provides guidelines for the design and installation of metal suspension systems for lay-in ceilings on projects under DSA jurisdiction. This IR does not preclude the use of other systems, including proprietary systems as discussed in Section 4 below or custom designed systems, when approved by DSA.

SCOPE This IR is applicable to the design, material requirements, gravity load support, seismic load resistance, and interface with mechanical and electrical apertures of metal suspension ceilings with lay-in panels. It covers ceiling systems whose total weight, including luminaires, services, and other devices, does not exceed 4 pounds per square foot (PSF). Heavier systems, faceted systems, ceilings that support lateral loads from partitions, and free-floating ceilings supported by chains or cables are beyond the scope of this IR and require project-specific design and details.

Appendix A below provides a library of details illustrating the requirements of this IR. The detail library is available in REVIT format for download via the link in Section 5.4 below. The project's design professional (DP) is responsible to select only the appropriate details that are applicable to the project-specific scope defined on the construction drawings. The design professional is also responsible to revise the library details to provide the project-specific information where required as noted in brackets with bold and italicized text, such as "[DP TO SPECIFY...]" It is not permitted to reproduce the body of this IR on the construction documents, except as described in Sections 5.9, 5.10, and Appendix A below.

The primary focus of this IR is typical flat ceiling systems with mineral or glass fiber tile, troffer light fixtures, and mechanical registers that fit into the ceiling grid. Other types of installations are also addressed but require additional design and detailing by the design professional to produce a safe and code-compliant system. This IR does not address the design and installation guidance is provided for sloped ceilings (see Section 2.7 below) and linear luminaires (see Appendix B below).

BACKGROUND Metal suspension ceiling systems with lay-in tiles are a common type of ceiling construction. Providing guidelines to clarify the design and construction of these systems in compliance with code prescribed requirements promotes consistency in detailing and construction documents, efficiency of plan review, and quality field installation.

California Building Code (CBC) Section 1617A.1.21 modifies American Society of Civil Engineers Standard 7 (ASCE) 7, Section 13.5.6.2 by adding an exception to the end of Section 13.5.6.2 and adding Section 13.5.6.2.3. ASCE 7 Section 13.5.6.2.2 requires the design and installation to comply with American Society for Testing and Materials (ASTM) standard specifications C635, C636, and E580.

IR 25-2 (Revised 11/03/23) Page 1 of 70 DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA

IR 25-2 SUSPENDED LAY-IN PANEL CEILING: 2022 CBC

1.4-inch in all horizontal directions. 1.6.2.2 Flexible sprinkler hose fitting that can accommodate 1/4-inch of ceiling movement.

1.6.3 Slack safety wires shall be considered hanger wires for installation and testing requirements.

1.6.4 Where Section 1.7.5 or 1.8.4 below require independent vertical support, the following provisions apply.

1.6.4.1 The specified design (including attachment to the structure above) shall be capable of supporting four times the weight of the luminaire or service.

1.6.4.2 Additional slack safety wires are not required.

1.7 Luminaires All luminaires shall be positively attached to the ceiling suspension systems by mechanical means per California Electrical Code (CEC) Article 410.36 and this section.

1.7.1 A minimum of two screws or approved fasteners capable of resisting a horizontal force equal to the weight of the fixture are required at each light fixture per ASTM E580 Section 5.3.1. See Section 2.1.1 below for pendant luminaires.

1.7.2 Surface-mounted luminaires shall be attached to the main runner with at least two positive clamping devices on each fixture. The clamping device shall completely surround the supporting ceiling runner and be made of steel with a minimum thickness of #14-gauge. Removable spring catches are not permitted. A #12-gauge slack safety wire shall be connected from each clamping device to the structure above. Provide additional supports when luminaires measure 8-feet or longer or exceed 56 pounds. Maximum spacing between supports shall not exceed 4-feet.

1.7.3 Luminaires weighing less than or equal to 10 pounds may be supported directly on the ceiling runners, but they shall have a minimum of one #12-gauge slack safety wire connected from the luminaire housing to the structure above.

1.7.4 Luminaires weighing greater than 10 pounds but less than or equal to 56 pounds may be supported directly on the ceiling runners, but they shall have a minimum of two #12-gauge slack safety wires connected from the luminaire housing at diagonal corners to the structure above.

Exception: All luminaires greater than 2-feet wide by 4-feet long and no more than 8-feet long weighing less than 56 pounds shall have a #12-gauge slack safety wire at each corner.

1.7.5 All luminaires weighing greater than 56 pounds shall be independently supported by no less than four full #12-gauge hanger wires (one at each corner) attached from the luminaire housing to the structure above or other approved hangers.

1.8 Services within the Ceiling All flexible sprinkler hose fitting mounting brackets, ceiling-mounted air terminals, solar daylight tubes, or other services shall be positively attached to the ceiling suspension systems by mechanical means to resist a horizontal force equal to the weight of the component.

1.8.1 Screws or approved fasteners are required. A minimum of two attachments are required at each component.

1.8.2 Flexible sprinkler hose fittings, ceiling-mounted air terminals, and other services weighing less than or equal to 20 pounds shall have one #12-gauge slack safety wire attached from the terminal or service to the structure above.

1.8.3 Flexible sprinkler hose fittings, ceiling-mounted air terminals, and other services weighing more than 20 pounds but less than or equal to 56 pounds shall have two #12-gauge slack safety wires attached from the terminal or service to the structure above.

1.8.4 Luminaires weighing greater than 56 pounds shall have a minimum of two #12-gauge slack safety wires attached from the luminaire housing to the structure above.

Exception: All luminaires greater than 2-feet wide by 4-feet long and no more than 8-feet long weighing less than 56 pounds shall have a #12-gauge slack safety wire at each corner.

1.8.5 All luminaires weighing greater than 56 pounds shall be independently supported by no less than four full #12-gauge hanger wires (one at each corner) attached from the luminaire housing to the structure above or other approved hangers.

1.9 Other Devices within the Ceiling Miscellaneous lightweight devices weighing 20 pounds or less, such as strobe lights, occupancy sensors, speakers, exit signs, etc., shall be attached to the ceiling grid per Section 1.8.1 above. In addition, devices weighing more than 10 pounds shall have one #12-gauge slack safety wire anchored to the structure above per Section 1.8.2 above.

2. ADDITIONAL REQUIREMENTS 2.1 Alternate Luminaire Types 2.1.1 Where pendant luminaires are specified in areas with a suspended ceiling, the construction documents shall include complete support details complying with IR 16-9: Pendant Luminaires.

2.1.2 Where recessed linear luminaires are specified in areas with a suspended ceiling, refer to Appendix B below for design and construction guidelines.

2.2 Fire-Resistance-Rated Ceilings The construction documents shall include a manufacturer's installation detail and specify a tested assembly number for fire-resistance-rated ceiling assemblies from a nationally recognized testing laboratory.

2.3 Free-Floating Ceilings Free-floating ceilings (i.e., ceilings not attached to any wall) supported by wires in accordance with this IR shall be braced in accordance with Section 1.3 above, regardless of the ceiling area, unless it can be demonstrated the anticipated ceiling movement will not cause failure of the ceiling components or failure of mechanical, electrical, plumbing, or fire life safety components and systems within the area of anticipated movement. The anticipated movement can be assumed as the hanger supports swinging to a 45-degree angle from vertical in any plan direction.

2.4 Other Panel Types Panels other than mineral fiber and glass fiber acoustical tile shall weigh no more than 0.5 PSF and be positively attached to the ceiling runners by mechanical means, such as bolts, cables, carabiners, d-shaped rings, screws, or rivets. Each attachment shall have an allowable design strength to support the weight of the panel acting in any direction. A minimum of two attachments are required for each panel. For ceiling installations utilizing panels other than mineral or glass fiber, 3/4-inch clearance shall be provided between the ceiling panel and the wall on the sides of the ceiling area which are free to slip. See Section 2.4 below for other panel types.

2.5 Acoustical Ceiling Tile Panel Clearance For ceiling installations utilizing acoustical tile panels of mineral or glass fiber, it is not mandatory to provide 3/4-inch clearance between the acoustical tile panels and the wall on the sides of the ceiling area which are free to slip. See Section 2.4 below for other panel types. Clearance between the ceiling grid members and the walls as required by Section 1.2.3 above is required regardless of the ceiling tile material.

2.6 Other Panel Types Panels other than mineral fiber and glass fiber acoustical tile shall weigh no more than 0.5 PSF and be positively attached to the ceiling runners by mechanical means, such as bolts, cables, carabiners, d-shaped rings, screws, or rivets. Each attachment shall have an allowable design strength to support the weight of the panel acting in any direction. A minimum of two attachments are required for each panel. For ceiling installations utilizing panels other than mineral or glass fiber, 3/4-inch clearance shall be provided between the ceiling panel and the wall on the sides of the ceiling area which are free to slip. See Section 2.4 below for other panel types.

2.7 Other Types of Attachment, such as clips, snap-in devices, perforated lips, clamping devices, or spring-loaded devices or hooks, can be accepted when qualified by an evaluation report per IR A-5. The attachment device shall be seismically qualified in accordance with ASCE 7 Section 13.2.5 or 13.2.6.

2.8 An alternate means of compliance per California Administrative Code (CAC) Section 4-304 may be used to achieve approval on a project-by-project basis for other means of attachment without an evaluation report per IR A-5. See Procedure (PR) 18-01: Request for Alternate Design, Materials and Methods of Construction. The alternate means of attachment shall have an allowable design strength to support the weight of the panel acting in any direction and shall be capable of maintaining that strength if the ceiling grid is distorted or out of level.

2.9 In lieu of direct restraint attachments, it is permitted to provide a secondary means of supporting the panel in case of panel dropout or dislodgement due to ceiling grid distortion or the ceiling grid becoming out-of-level. The secondary attachment shall have an allowable design strength to support two times the weight of the panel acting in any direction. A slack wire or cable connecting each panel to the ceiling grid or structure above are examples of secondary means of support.

2.10 Special attachment details complying with one of the methods outlined above shall be provided for the ceiling perimeter condition, where panels are cut or altered and where nonstandard panel sizes or edge conditions occur.

2.11 Exits Ceilings over exit paths shall be installed in accordance with ASCE 7 Section 13.5.6.2.3, Item 1 as added by CBC Section 1617A.1.21. A main or cross runner shall be installed on all sides of each ceiling panel, luminaire, and service device. Splices or intersection of such runners shall be attached with corner connectors such as pop rivets, screws, pins, plates with end tabs, or other approved connectors.

2.12 Free-Floating Ceilings Free-floating ceilings (i.e., ceilings not attached to any wall) supported by wires in accordance with this IR shall be braced in accordance with Section 1.3 above, regardless of the ceiling area, unless it can be demonstrated the anticipated ceiling movement will not cause failure of the ceiling components or failure of mechanical, electrical, plumbing, or fire life safety components and systems within the area of anticipated movement. The anticipated movement can be assumed as the hanger supports swinging to a 45-degree angle from vertical in any plan direction.

2.13 The perimeter of free-floating ceilings shall be supported by a continuous runner which is specified in accordance with ASTM E580 Section 5.1.2.

2.14 Sloped Ceilings Sloped ceilings with acoustical mineral or glass fiber tiles, surrounded on all sides by partition walls are permitted in accordance with the requirements of this section. Sloped ceilings not meeting the requirements of this section shall be custom designed and detailed.

2.15 The slope of the ceiling shall not exceed the manufacturer's published maximum slope recommendation for less than 90 degrees from horizontal, whichever is less. The ceiling shall be maintained at the free sides.

2.16 Brace wires are to be installed a maximum of 45 degrees from the horizontal plane.

2.17 Shims between the tiles and the grid are required to ensure panels are centered to resist sliding out.

2.18 Panel edge hold down clips are to be installed along the top of the grid to the ceiling tiles as follows:

2.18.10.1 For ceiling slope less than or equal to 15 degrees from horizontal: Clips are to be installed at each main runner and cross runner around the perimeter of the ceiling in the first bay adjacent to the walls. See Appendix A Detail 2.90 below.

2.18.10.2 For ceiling slope greater than 15 degrees but less than or equal to 25 degrees from horizontal: Clips are to be installed per the illustration in Appendix A Detail 2.90 below.

2.18.11 A minimum 3/4" horizontal clearance of the runners to the wall angle is to be maintained at the free sides.

2.18.12 The use of a 7/8-inch wall angle requires proprietary seismic clips. Each seismic clip shall be attached to the wall angle with two screws.

2.18.13 Sloped free floating ceilings are beyond the scope of this IR. The design professional is responsible to provide project-specific design (including supporting calculations) and details.

2.19 DSA may require structural calculations to demonstrate the adequacy of the lateral bracing system.

2.20 Sloped ceilings shall comply with the following detailing requirements:

2.20.1 Attachment of proprietary perimeter clips to the walls shall comply with Section 1.2.6 above.

2.20.2 Main runners are to be installed parallel (up/down) to the direction of the ceiling slope.

2.20.3 Runners at the bottom/lower end of the slope shall be installed as the attached side per Section 1.2.3 above.

2.20.4 Runners at the top/higher end of the slope shall be installed as the free side per Section 1.2.3 above.

2.20.5 Perimeter wall brackets at the top and bottom of the slope are to be shimmed or installed with adjustable wall mounting brackets such that the bottom grid of the angle aligns with the plane of the ceiling. This is to ensure the 90-degree angle of the wall trim in relation to the runner is maintained. Bending the leg(s) of the wall angle to match the slope of the ceiling is prohibited.

2.20.6 Hanger wires, including slack wires, are to be installed vertical and plumb.

2.20.7 Compression struts are to be installed vertical and plumb in compliance with Section 1.3.4.2 above.

2.20.8 Brace wires are to be installed a maximum of 45 degrees from the horizontal plane.

2.20.9 Shims between the tiles and the grid are required to ensure panels are centered to resist sliding out.

2.20.10 Panel edge hold down clips are to be installed along the top of the grid to the ceiling tiles as follows:

2.20.10.1 For ceiling slope less than or equal to 15 degrees from horizontal: Clips are to be installed at each main runner and cross runner around the perimeter of the ceiling in the first bay adjacent to the walls. See Appendix A Detail 2.90 below.

2.20.10.2 For ceiling slope greater than 15 degrees but less than or equal to 25 degrees from horizontal: Clips are to be installed per the illustration in Appendix A Detail 2.90 below.

2.20.11 A minimum 3/4" horizontal clearance of the runners to the wall angle is to be maintained at the free sides.

2.20.12 The use of a 7/8-inch wall angle requires proprietary seismic clips. Each seismic clip shall be attached to the wall angle with two screws.

2.20.13 Sloped free floating ceilings are beyond the scope of this IR. The design professional is responsible to provide project-specific design (including supporting calculations) and details.

2.21 DSA may require structural calculations to demonstrate the adequacy of the lateral bracing system.

2.22 Sloped ceilings shall comply with the following detailing requirements:

2.22.1 Attachment of proprietary perimeter clips to the walls shall comply with Section 1.2.6 above.

2.22.2 Main runners are to be installed parallel (up/down) to the direction of the ceiling slope.

2.22.3 Runners at the bottom/lower end of the slope shall be installed as the attached side per Section 1.2.3 above.

2.22.4 Runners at the top/higher end of the slope shall be installed as the free side per Section 1.2.3 above.

2.22.5 Perimeter wall brackets at the top and bottom of the slope are to be shimmed or installed with adjustable wall mounting brackets such that the bottom grid of the angle aligns with the plane of the ceiling. This is to ensure the 90-degree angle of the wall trim in relation to the runner is maintained. Bending the leg(s) of the wall angle to match the slope of the ceiling is prohibited.

2.22.6 Hanger wires, including slack wires, are to be installed vertical and plumb.

2.22.7 Compression struts are to be installed vertical and plumb in compliance with Section 1.3.4.2 above.

2.22.8 Brace wires are to be installed a maximum of 45 degrees from the horizontal plane.

2.22.9 Shims between the tiles and the grid are required to ensure panels are centered to resist sliding out.

2.22.10 Panel edge hold down clips are to be installed along the top of the grid to the ceiling tiles as follows:

2.22.10.1 For ceiling slope less than or equal to 15 degrees from horizontal: Clips are to be installed at each main runner and cross runner around the perimeter of the ceiling in the first bay adjacent to the walls. See Appendix A Detail 2.90 below.

2.22.10.2 For ceiling slope greater than 15 degrees but less than or equal to 25 degrees from horizontal: Clips are to be installed per the illustration in Appendix A Detail 2.90 below.

2.22.11 A minimum 3/4" horizontal clearance of the runners to the wall angle is to be maintained at the free sides.

2.22.12 The use of a 7/8-inch wall angle requires proprietary seismic clips. Each seismic clip shall be attached to the wall angle with two screws.

2.22.13 Sloped free floating ceilings are beyond the scope of this IR. The design professional is responsible to provide project-specific design (including supporting calculations) and details.

2.23 DSA may require structural calculations to demonstrate the adequacy of the lateral bracing system.

2.24 Sloped ceilings shall comply with the following detailing requirements:

2.24.1 Attachment of proprietary perimeter clips to the walls shall comply with Section 1.2.6 above.

2.24.2 Main runners are to be installed parallel (up/down) to the direction of the ceiling slope.

2.24.3 Runners at the bottom/lower end of the slope shall be installed as the attached side per Section 1.2.3 above.

2.24.4 Runners at the top/higher end of the slope shall be installed as the free side per Section 1.2.3 above.

2.24.5 Perimeter wall brackets at the top and bottom of the slope are to be shimmed or installed with adjustable wall mounting brackets such that the bottom grid of the angle aligns with the plane of the ceiling. This is to ensure the 90-degree angle of the wall trim in relation to the runner is maintained. Bending the leg(s) of the wall angle to match the slope of the ceiling is prohibited.

2.24.6 Hanger wires, including slack wires, are to be installed vertical and plumb.

2.24.7 Compression struts are to be installed vertical and plumb in compliance with Section 1.3.4.2 above.

2.24.8 Brace wires are to be installed a maximum of 45 degrees from the horizontal plane.

2.24.9 Shims between the tiles and the grid are required to ensure panels are centered to resist sliding out.

2.24.10 Panel edge hold down clips are to be installed along the top of the grid to the ceiling tiles as follows:

2.24.10.1 For ceiling slope less than or equal to 15 degrees from horizontal: Clips are to be installed at each main runner and cross runner around the perimeter of the ceiling in the first bay adjacent to the walls. See Appendix A Detail 2.90 below.

2.24.10.2 For ceiling slope greater than 15 degrees but less than or equal to 25 degrees from horizontal: Clips are to be installed per the illustration in Appendix A Detail 2.90 below.

2.24.11 A minimum 3/4" horizontal clearance of the runners to the wall angle is to be maintained at the free sides.

2.24.12 The use of a 7/8-inch wall angle requires proprietary seismic clips. Each seismic clip shall be attached to the wall angle with two screws.

2.24.13 Sloped free floating ceilings are beyond the scope of this IR. The design professional is responsible to provide project-specific design (including supporting calculations) and details.

2.25 DSA may require structural calculations to demonstrate the adequacy of the lateral bracing system.

2.26 Sloped ceilings shall comply with the following detailing requirements:

2.26.1 Attachment of proprietary perimeter clips to the walls shall comply with Section 1.2.6 above.

2.26.2 Main runners are to be installed parallel (up/down) to the direction of the ceiling slope.

2.26.3 Runners at the bottom/lower end of the slope shall be installed as the attached side per Section 1.2.3 above.

2.26.4 Runners at the top/higher end of the slope shall be installed as the free side per Section 1.2.3 above.

2.26.5 Perimeter wall brackets at the top and bottom of the slope are to be shimmed or installed with adjustable wall mounting brackets such that the bottom grid of the angle aligns with the plane of the ceiling. This is to ensure the 90-degree angle of the wall trim in relation to the runner is maintained. Bending the leg(s) of the wall angle to match the slope of the ceiling is prohibited.

2.26.6 Hanger wires, including slack wires, are to be installed vertical and plumb.

2.26.7 Compression struts are to be installed vertical and plumb in compliance with Section 1.3.4.2 above.

2.26.8 Brace wires are to be installed a maximum of 45 degrees from the horizontal plane.

2.26.9 Shims between the tiles and the grid are required to ensure panels are centered to resist sliding out.

2.26.10 Panel edge hold down clips are to be installed along the top of the grid to the ceiling tiles as follows:

2.26.10.1 For ceiling slope less than or equal to 15 degrees from horizontal: Clips are to be installed at each main runner and cross runner around the perimeter of the ceiling in the first bay adjacent to the walls. See Appendix A Detail 2.90 below.

2.26.10.2 For ceiling slope greater than 15 degrees but less than or equal to 25 degrees from horizontal: Clips are to be installed per the illustration in Appendix A Detail 2.90 below.

2.26.11 A minimum 3/4" horizontal clearance of the runners to the wall angle is to be maintained at the free sides.

2.26.12 The use of a 7/8-inch wall angle requires proprietary seismic clips. Each seismic clip shall be attached to the wall angle with two screws.

2.26.13 Sloped free floating ceilings are beyond the scope of this IR. The design professional is responsible to provide project-specific design (including supporting calculations) and details.

2.27 DSA may require structural calculations to demonstrate the adequacy of the lateral bracing system.

2.28 Sloped ceilings shall comply with the following detailing requirements:

2.28.1 Attachment of proprietary perimeter clips to the walls shall comply with Section 1.2.6 above.

2.28.2 Main runners are to be installed parallel (up/down) to the direction of the ceiling slope.

2.28.3 Runners at the bottom/lower end of the slope shall be installed as the attached side per Section 1.2.3 above.

2.28.4 Runners at the top/higher end of the slope shall be installed as the free side per Section 1.2.3 above.

2.28.5 Perimeter wall brackets at the top and bottom of the slope are to be shimmed or installed with adjustable wall mounting brackets such that the bottom grid of the angle aligns with the plane of the ceiling. This is to ensure the 90-degree angle of the wall trim in relation to the runner is maintained. Bending the leg(s) of the wall angle to match the slope of the ceiling is prohibited.

2.28.6 Hanger wires, including slack wires, are to be installed vertical and plumb.

2.28.7 Compression struts are to be installed vertical and plumb in compliance with Section 1.3.4.2 above.

2.28.8 Brace wires are to be installed a maximum of 45 degrees from the horizontal plane.

2.28.9 Shims between the tiles and the grid are required to ensure panels are centered to resist sliding out.

2.28.10 Panel edge hold down clips are to be installed along the top of the grid to the ceiling tiles as follows:

2.28.10.1 For ceiling slope less than or equal to 15 degrees from horizontal: Clips are to be installed at each main runner and cross runner around the perimeter of the ceiling in the first bay adjacent to the walls. See Appendix A Detail 2.90 below.

2.28.10.2 For ceiling slope greater than 15 degrees but less than or equal to 25 degrees from horizontal: Clips are to be installed per the illustration in Appendix A Detail 2.90 below.

2.28.11 A minimum 3/4" horizontal clearance of the runners to the wall angle is to be maintained at the free sides.

2.28.12 The use of a 7/8-inch wall angle requires proprietary seismic clips. Each seismic clip shall be attached to the wall angle with two screws.

2.28.13 Sloped free floating ceilings are beyond the scope of this IR. The design professional is responsible to provide project-specific design (including supporting calculations) and details.

2.29 DSA may require structural calculations to demonstrate the adequacy of the lateral bracing system.

2.30 Sloped ceilings shall comply with the following detailing requirements:

2.30.1 Attachment of proprietary perimeter clips to the walls shall comply with Section 1.2.6 above.

2.30.2 Main runners are to be installed parallel (up/down) to the direction of the ceiling slope.

2.30.3 Runners at the bottom/lower end of the slope shall be installed as the attached side per Section 1.2.3 above.

2.30.4 Runners at the top/higher end of the slope shall be installed as the free side per Section 1.2.3 above.

2.30.5 Perimeter wall brackets at the top and bottom of the slope are to be shimmed or installed with adjustable wall mounting brackets such that the bottom grid of the angle aligns with the plane of the ceiling. This is to ensure the 90-degree angle of the wall trim in relation to the runner is maintained. Bending the leg(s) of the wall angle to match the slope of the ceiling is prohibited.

2.30.6 Hanger wires, including slack wires, are to be installed vertical and plumb.

2.30.7 Compression struts are to be installed vertical and plumb in compliance with Section 1.3.4.2 above.

2.30.8 Brace wires are to be installed a maximum of 45 degrees from the horizontal plane.

2.30.9 Shims between the tiles and the grid are required to ensure panels are centered to resist sliding out.

2.30.10 Panel edge hold down clips are to be installed along the top of the grid to the ceiling tiles as follows:

2.30.10.1 For ceiling slope less than or equal to 15 degrees from horizontal: Clips are to be installed at each main runner and cross runner around the perimeter of the ceiling in the first bay adjacent to the walls. See Appendix A Detail 2.90 below.

2.30.10.2 For ceiling slope greater than 15 degrees but less than or equal to 25 degrees from horizontal: Clips are to be installed per the illustration in Appendix A Detail 2.90 below.

2.30.11 A minimum 3/4" horizontal clearance of the runners to the wall angle is to be maintained at the free sides.

2.30.12 The use of a 7/8-inch wall angle requires proprietary seismic clips. Each seismic clip shall be attached to the wall angle with two screws.

2.30.13 Sloped free floating ceilings are beyond the scope of this IR. The design professional is responsible to provide project-specific design (including supporting calculations) and details.

2.31 DSA may require structural calculations to demonstrate the adequacy of the lateral bracing system.

2.32 Sloped ceilings shall comply with the following detailing requirements:

IR 25-2  
SUSPENDED LAY-IN PANEL CEILING: 2022 CBC

1. CEILING SYSTEM GENERAL NOTES

- 1.01 Ceiling system components shall comply with ASTM C635 and Section 5.1 of ASTM E580.
- 1.02 The ceiling grid system shall be rated heavy duty as defined by ASTM C635.
- 1.03 Ceiling systems. The following ceiling system(s) is/are part of the scope of this project:  
 Manufacturer: *[DP to specify]*  
 Product Name: *[DP to specify]*  
 Evaluation Report Number: *[DP to specify]*  
 Main Runner Part, Model, or Catalog Number: *[DP to specify]*  
 Cross Runner Part, Model, or Catalog Number: *[DP to specify]*
- 1.04 Seismic Wall Clip:  
 Manufacturer's Model: *[DP to specify if used]*
- 1.05 Ceiling panels shall not support any luminaires, air terminals, or devices.
- 1.06 For acoustical tile panels of any material other than mineral or glass fiber, a 1/2" clearance shall be provided between the panel and the wall on the sides of the ceiling free to slip. Clearance between ceiling grid runners and walls shall comply with the details on these drawings regardless of ceiling tile material.

2. MATERIALS

- 2.01 Ceiling wire shall be Class 1 zinc coated (galvanized) carbon steel conforming to ASTM A641. Wire shall be #12 gauge (0.106" diameter) with soft temper and minimum ultimate tensile strength = 70 ksi.
- 2.02 Galvanized sheet steel (including that used for metal stud compression struts) shall conform to ASTM A653, or other equivalent sheet steel listed in Section A3.1 of the North American Specification for the Design of Cold-Formed Steel Structural Members, (AISI S100). Material 43 mil (18 gauge) thick and lighter shall have minimum yield strength of 33 ksi. Material 54 mil (16 gauge) thick and heavier shall have a minimum yield strength of 50 ksi.
- 2.03 Electrical metallic tube (EMT) shall conform to ANSI C80.3/JUL 797 carbon steel with G90 galvanizing. EMT shall have minimum yield strength of 30 ksi and minimum ultimate strength of 48 ksi.

3. ATTACHMENT OF HANGER AND BRACING WIRES

- 3.01 All ceiling hanger and bracing wires shall be separated at least 6 inches from all unbraced ducts, pipes, conduit, etc.
- 3.02 Hanger and bracing wires shall not attach to or bend around obstructions including but not limited to piping, ductwork, conduit, and equipment.
- 3.03 Hanger wires that are more than one (horizontal) in six (vertical) out of plumb shall have counter-sloping wires.

ARMSTRONG  
PRELUDE XL WITH SEISMIC RX SUSPENSION SYSTEM

|               |              |            |  |
|---------------|--------------|------------|--|
| Detail Title: | ICC ESR 1308 | Detail No. |  |
| CEILING NOTES | 7301         | 1.00       |  |
|               | XL7341       |            |  |

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SUSPENDED LAY-IN PANEL CEILING: 2022 CBC

4. FASTENERS AND WELDING

- 3.04 Slack safety wires shall be considered hanger wires for installation and testing requirements.
- 3.05 Hanger and bracing wire anchorage to the structure shall be installed such that the direction of the anchorage aligns with the direction of the wire. Bracing wire ceiling clips shall be bent as shown in the details and rotated as required to align with the direction of the wire. Screws in wood shall be installed to align with the direction of the wire.
- 4.01 Sheet metal screws shall comply with ASTM C1513 and ASME B18.6.3. Penetration of screws through joined material shall not be less than three exposed threads.
- 4.02 Expansion anchors shall be: *[DP to specify manufacturer, product, evaluation report number, and test load for each size specified per CBC 1910A.5.4.]*
- 4.03 Power-Actuated Fasteners shall be: *[DP to specify manufacturer, product, evaluation report number.]*
- 4.04 If not otherwise specified in the evaluation report, power-actuated fasteners installed in steel shall be installed so the entire pointed end of the fastener is driven through the steel member.
- 4.05 Power-actuated fasteners in concrete or masonry are not permitted for bracing wires.
- 4.06 Concrete reinforcement and prestressing tendons shall be located by non-destructive means prior to installing post-installed anchors.
- 4.07 Welding shall be in accordance with AWS D1.3 using E60XX series electrodes.

5. TESTING

- 5.01 All field testing shall be performed in the presence of the project inspector.
- 5.02 Post-installed anchors in concrete used to support hanger wires shall be tested at a frequency of 10 percent. Power-actuated fasteners in concrete shall be field tested for 200 pounds in tension. All other post-installed anchors in concrete shall be tested in accordance with CBC Section 1910A.5.
- 5.03 Post-installed anchors in concrete used to attach bracing wires shall be tested at a frequency of 50 percent and in accordance with CBC Section 1910A.5.

6. LUMINAIRES

- 6.01 All luminaires shall be positively attached to the ceiling suspension systems by mechanical means to resist a horizontal force equal to the weight of the luminaire. A minimum of two screws or approved fasteners are required at each luminaire per ASTM E580 Section 5.3.1.
- 6.02 Surface-mounted luminaires shall be attached to the main runner with at least two positive clamping devices. The clamping device shall completely surround the supporting ceiling runner and be made of steel with a minimum thickness of #14 gauge. Rotational spring catches are not permitted. A #12 gauge slack safety wire shall be connected from each clamping device to the structure above. Additional supports shall be provided when a luminaire is 8 feet or longer or exceeds 56 pounds. Maximum spacing between supports shall not exceed 8 feet.

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| Detail Title: | REV 09/21/2015 | Detail No. |  |
| CEILING NOTES | REV 03/2022    | 1.00       |  |
|               | REV 11/2023    |            |  |

NOT APPLICABLE

IR 25-2  
SUSPENDED LAY-IN PANEL CEILING: 2022 CBC

7. SERVICES WITHIN THE CEILING

- 6.03 Luminaires weighing less than or equal to 10 pounds supported directly on the ceiling runners shall have a minimum of one #12 gauge slack safety wire connected from the fixture housing to the structure above.
- 6.04 Luminaires weighing greater than 10 pounds but less than or equal to 56 pounds supported directly on the ceiling runners shall have a minimum of two #12 gauge slack safety wires connected from the fixture housing at diagonal corners to the structure above.  
 Exception: All luminaires greater than two by four feet weighing less than 56 pounds shall have a #12 gauge slack safety wire at each corner.
- 6.05 All luminaires weighing greater than 56 pounds shall be independently supported from the structure above. See support details on these drawings for more information.
- 7.01 All flexible sprinkler hose fitting mounting brackets, ceiling-mounted air terminals, or other services shall be positively attached to the ceiling suspension systems by mechanical means. Screws or other fasteners specified on the drawings are required. A minimum of two attachments are required at each component.
- 7.02 Ceiling-mounted services weighing less than or equal to 20 pounds shall have one #12 gauge slack safety wire attached from the terminal or service to the structure above.
- 7.03 Ceiling-mounted services weighing more than 20 pounds but less than or equal to 56 pounds shall have two #12 gauge slack safety wires (at diagonal corners) connected from the terminal or service to the structure above.
- 7.04 Ceiling-mounted services weighing more than 56 pounds shall be independently supported from the structure above. See support details on these drawings for more information.

8. OTHER DEVICES WITHIN THE CEILING

- 8.01 All lightweight miscellaneous devices, such as strobe lights, occupancy sensors, speakers, exit signs, etc., shall be attached to the ceiling grid. Devices weighing more than 10 pounds shall have a #12 gauge slack safety wire anchored to the structure above. Devices weighing more than 20 pounds shall be independently supported from the structure above.

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| Detail Title: | REV 09/21/2015 | Detail No. |  |
| CEILING NOTES | REV 03/2022    | 1.00       |  |
|               | REV 11/2023    |            |  |



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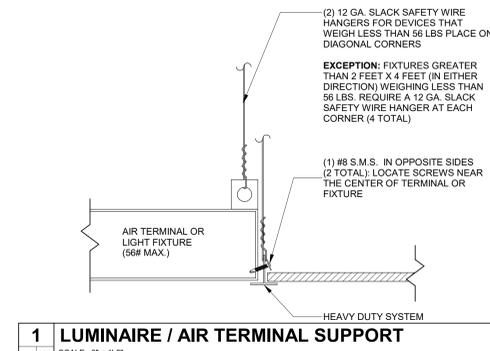
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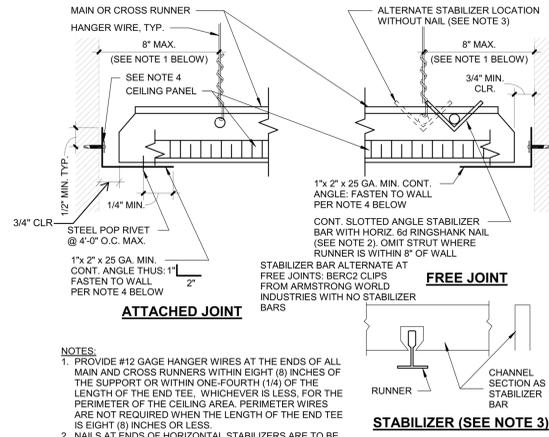
VENTURA COLLEGE ADMIN BLDG  
 ALTERATION  
 4667 TELEGRAPH RD., VENTURA, CA 93003  
 SUSPENDED CEILING NOTES

| NO. | REVISION | DATE |
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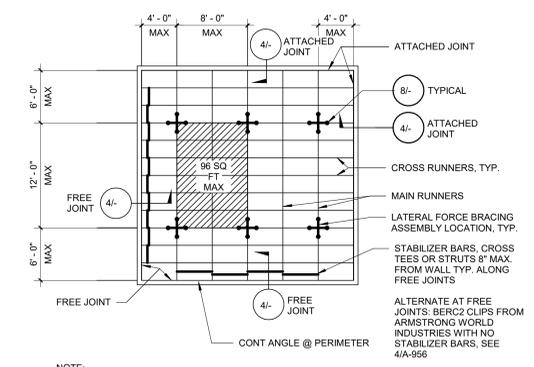
PROJECT MANAGER  
 MHT  
 DRAWN BY: CK/CCS/DD/JM/SL/DS  
 CHECKED BY: DS  
 DATE: 06/20/2025  
 PROJECT NUMBER: 3425-01-ED24  
 SHEET: A-912



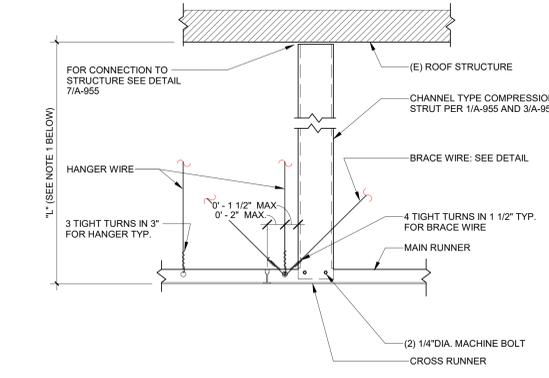
**1 LUMINAIRE / AIR TERMINAL SUPPORT**  
SCALE: 3" = 1'-0"



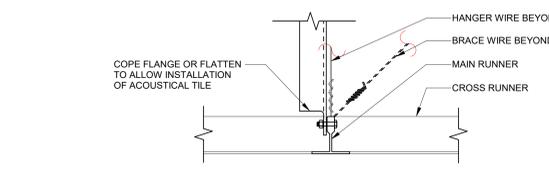
**5 CEILING PERIMETER**  
SCALE: 1/8" = 1'-0"



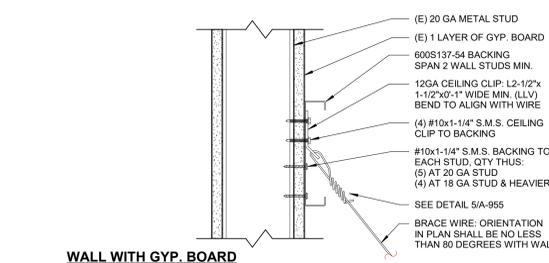
**4 TYP. CEILING PLAN 8'X12' BRACE ASSEMBLY SPACING**  
SCALE: 1/8" = 1'-0"



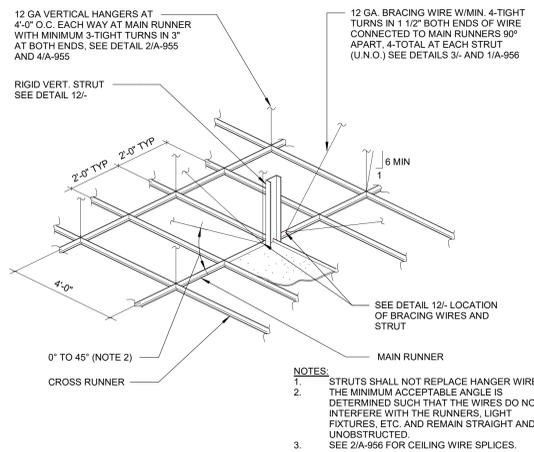
**2 COMPRESSION STRUT - CHANNEL TYPE**  
SCALE: 1 1/2" = 1'-0"



**3 SECTION**  
SCALE: 1 1/2" = 1'-0"



**7 BRACING WIRE TO METAL STUD WALL**  
SCALE: 1/8" = 1'-0"



**6 SUSPENSION & LATERAL BRACING ASSEMBLY**  
SCALE: 1/8" = 1'-0"



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SUSPENDED CEILING DETAILS

| NO. | REVISION | DATE |
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PROJECT MANAGER: MHT  
DRAWN BY: CK/CCS/DD/JM/SL | DS  
CHECKED BY: DS  
DATE: 06/20/2025  
PROJECT NUMBER: 3425-01-ED24  
SHEET: A-913

ALL NOTES AND DETAILS ON SHEETS A-951 THROUGH A-956 ARE FROM DSA IR 25-2 REVISED 11/03/23 UNDER 2022 CBC

| STRUCTURAL SYSTEM OF FLOOR/ ROOF ABOVE SUSPENDED CEILING | APPLICABLE DETAIL |
|--|-------------------|
| BARE METAL DECK  | N/A               |
| CONCRETE OVER METAL DECK                                 | N/A               |
| CONCRETE SLAB, BEAM, OR JOIST                            | N/A               |
| STRUCTURAL STEEL   | N/A               |
| SAWN TIMBER WITH GYPSUM BOARD                            | N/A               |
| SAWN TIMBER WITHOUT GYPSUM BOARD                         | N/A               |
| WOOD JOIST   | N/A               |

6 COMPRESSION STRUT CONNECTION TABLE

NTS

| STRUCTURAL SYSTEM OF FLOOR/ ROOF ABOVE SUSPENDED CEILING | APPLICABLE HANGER WIRE DETAIL | APPLICABLE BRACE WIRE DETAIL |
|--|-------------------------------|------------------------------|
| BARE METAL DECK  | N/A                           | N/A                          |
| CONCRETE OVER METAL DECK                                 | N/A                           | N/A                          |
| CONCRETE SLAB, BEAM, OR JOIST                            | N/A                           | N/A                          |
| STRUCTURAL STEEL   | N/A                           | N/A                          |
| METAL STUD WALL  | N/A                           | N/A                          |
| SAWN TIMBER  | 4-                            | 1/A-956                      |
| WOOD JOIST   | N/A                           | N/A                          |
| WOOD CHORD TRUSS   | N/A                           | N/A                          |
| OPEN WEB STEEL JOIST                                     | N/A                           | N/A                          |

1 HANGER & BRACE WIRE CONN. TABLE

SCALE: 12" = 1'-0"

| COMPRESSION STRUT CHANNEL SECTION           | MAXIMUM LENGTH |
|---|----------------|
| 1/2" DIAMETER EMT (0.042" WALL THICKNESS)   | 3' - 11"       |
| 3/4" DIAMETER EMT (0.049" WALL THICKNESS)   | 6' - 4"        |
| 1" DIAMETER EMT (0.057" WALL THICKNESS)     | 9' - 9"        |
| 1 1/4" DIAMETER EMT (0.065" WALL THICKNESS) | 12' - 9"       |
| 1 1/2" DIAMETER EMT (0.065" WALL THICKNESS) | 14' - 9"       |
| 2" DIAMETER EMT (0.065" WALL THICKNESS)     | 18' - 10"      |

| COMPRESSION STRUT CHANNEL SECTION | MAXIMUM LENGTH |
|-----------------------------------|----------------|
| 250S125-33                        | 5' - 10"       |
| 250S137-33                        | 6' - 10"       |
| 362S137-33                        | 8' - 0"        |
| 250S137-43                        | 8' - 10"       |
| 400S137-43                        | 10' - 10"      |

3 COMPRESSION STRUT TABLE

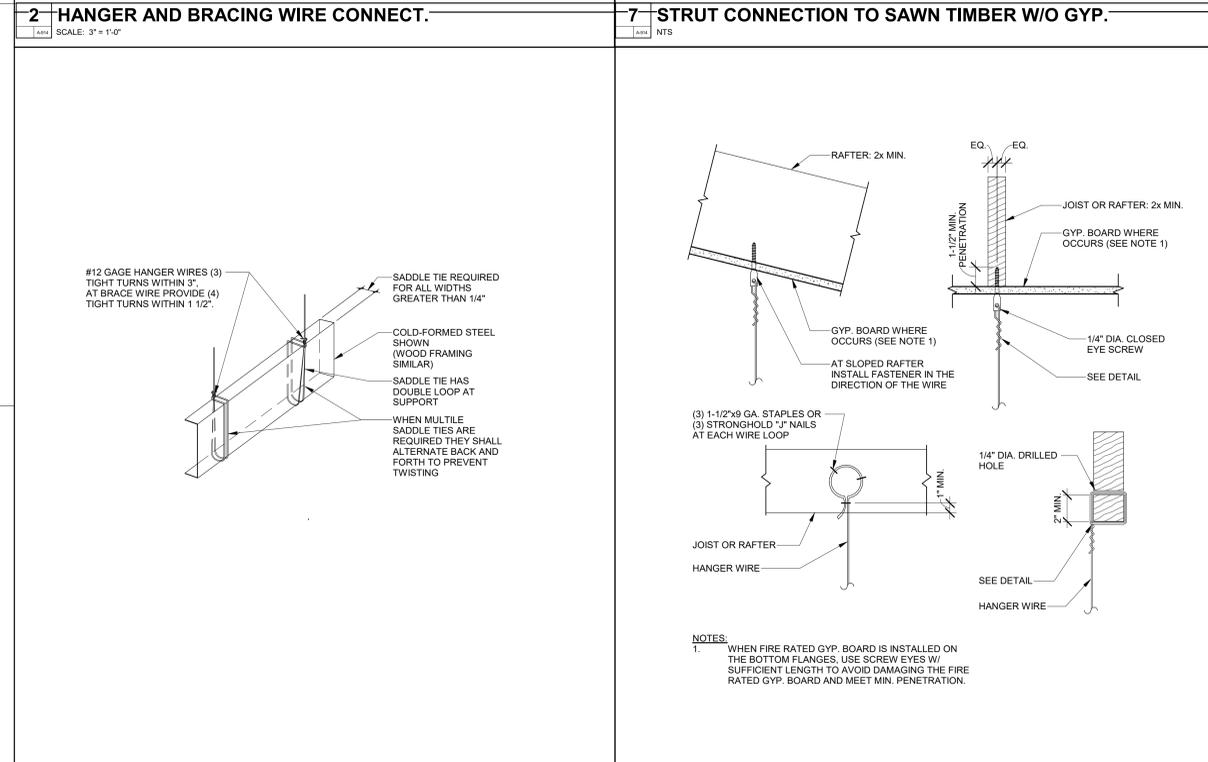
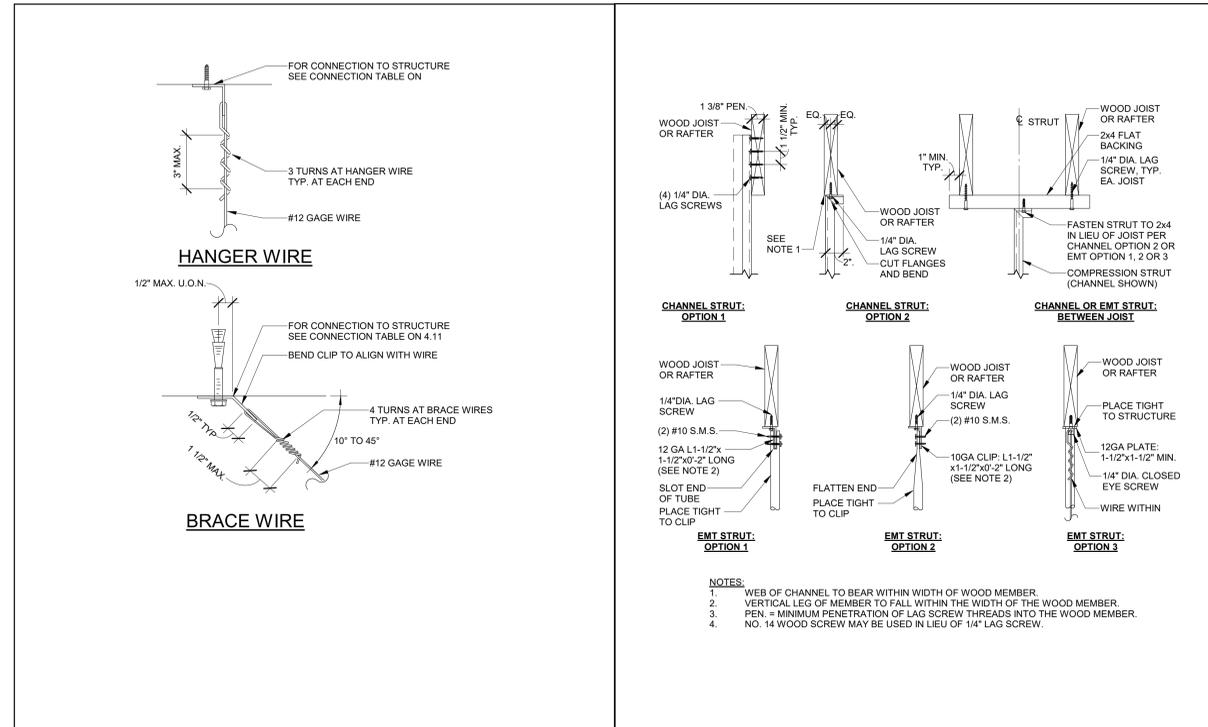
SCALE: 12" = 1'-0"

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PROJECT MANAGER: MHT  
 DRAWN BY: GK/CCS/DD/JM/SL/DS  
 CHECKED BY: DS  
 DATE: 06/20/2025  
 PROJECT NUMBER: 3425-01-ED24  
 SHEET: A-914

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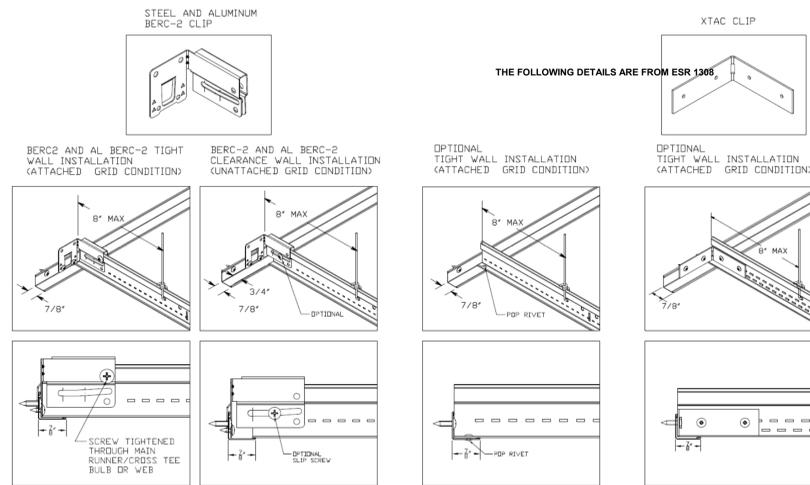
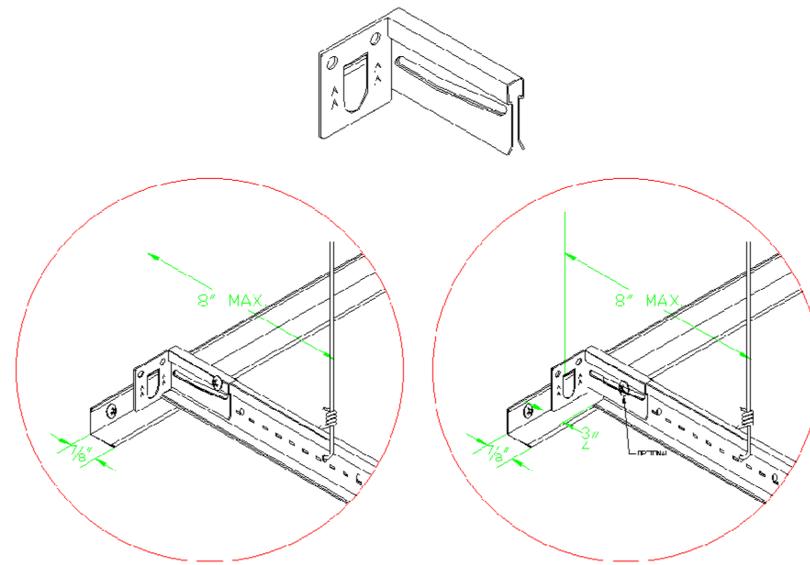


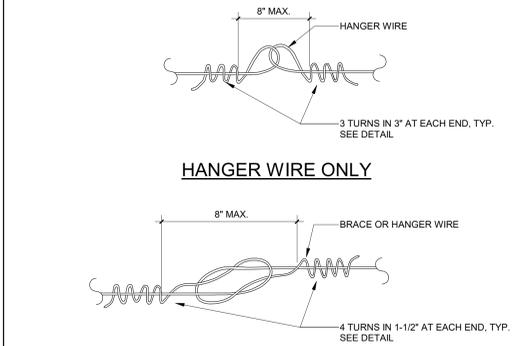
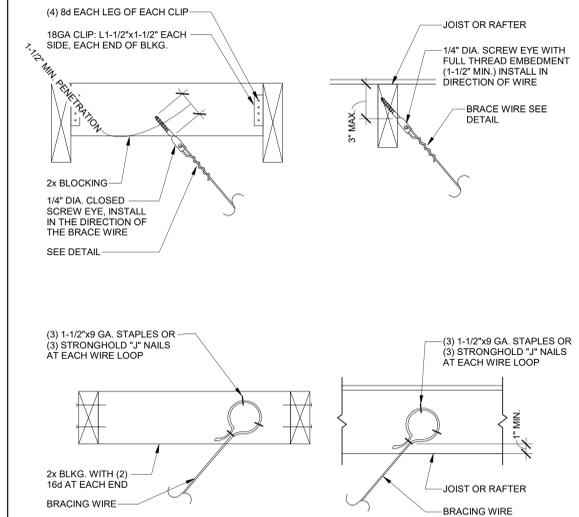
FIGURE 2—BERC-2, AL BERC-2, and XTAC CLIPS

3 BERC2 CLIP-ESR 1308

NTS

2 BRACE WIRE CONNECTION TO SAWN TIMBER

NTS



NOTES:  
 1. WIRE SPLICES ARE SHOWN LOOSELY TIED FOR ILLUSTRATIVE PURPOSES ONLY AND SHALL BE DRAWN TIGHT TO COMPLETE INSTALLATION WHEN CONSTRUCTED.  
 2. WIRE LOOPS SHALL BE TIGHTLY WRAPPED AND SHARPLY BENT TO PREVENT ANY VERTICAL MOVEMENT OR ROTATION WITHIN THE LOOPS.  
 3. EACH HANGER AND BRACE WIRE SHALL BE SPLICED NO MORE THAN ONCE ALONG ITS LENGTH.

1 6.10 - CEILING WIRE SPLICES

SCALE: 3\"/>



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PROJECT MANAGER  
 MHT  
 DRAWN BY: GK/CCS/DD/JM/SL/DS  
 CHECKED BY: DS  
 DATE: 06/20/2025  
 PROJECT NUMBER: 3425-01-ED24  
 SHEET: A-915



| MECHANICAL LEGEND |   |
|-------------------|---|
|                   | (E) RECTANGULAR DUCTWORK TO REMAIN        |
|                   | (E) RECTANGULAR DUCTWORK TO BE DEMOLISHED |
|                   | (E) ROUND DUCTWORK TO REMAIN              |
|                   | (E) ROUND DUCTWORK TO BE DEMOLISHED       |
|                   | (E) REFRIGERANT LINES                     |
|                   | P.O.D. POINT OF DISCONNECTION             |



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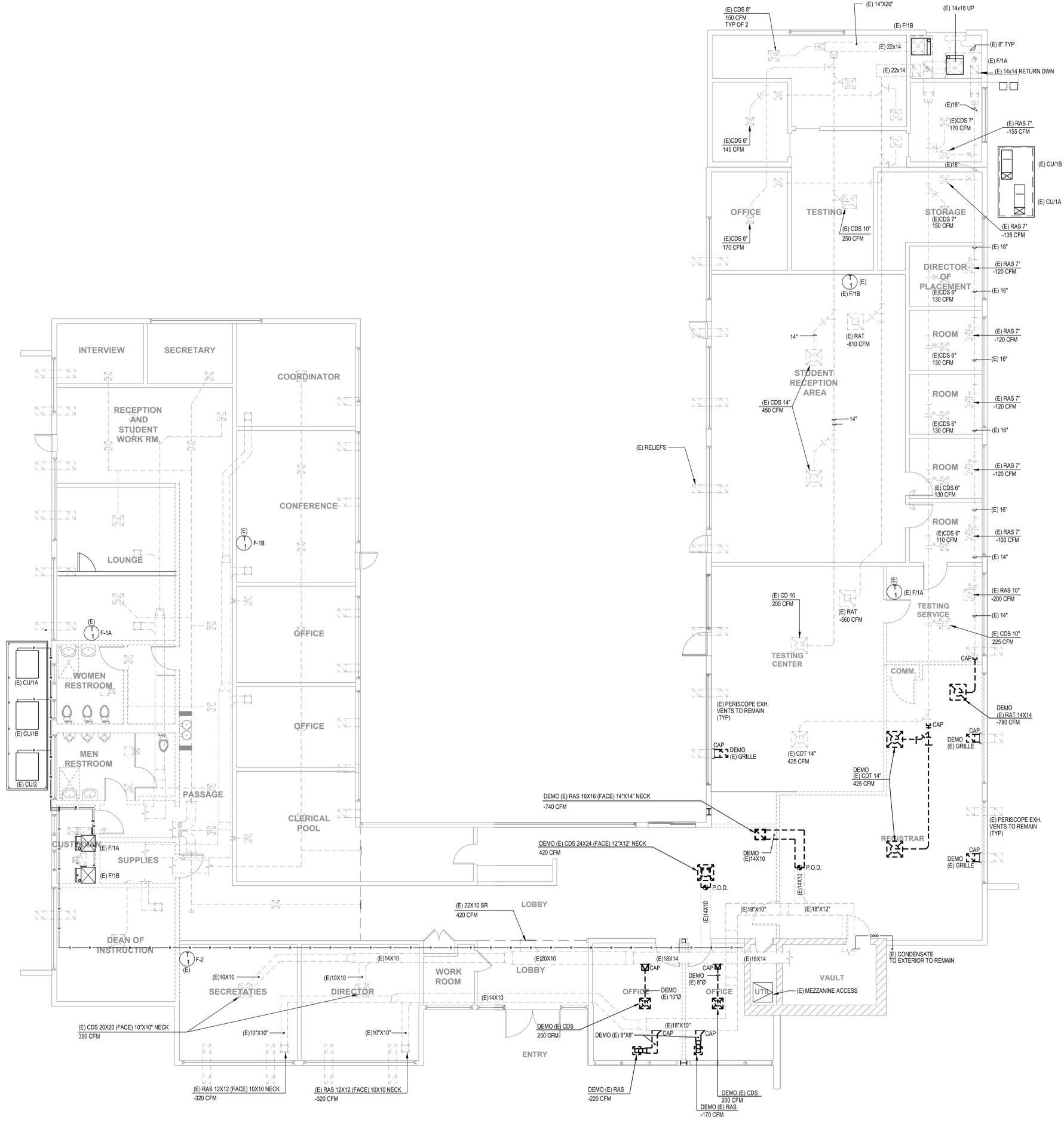


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EXISTING/DEMO  
 MECHANICAL FLOOR PLAN



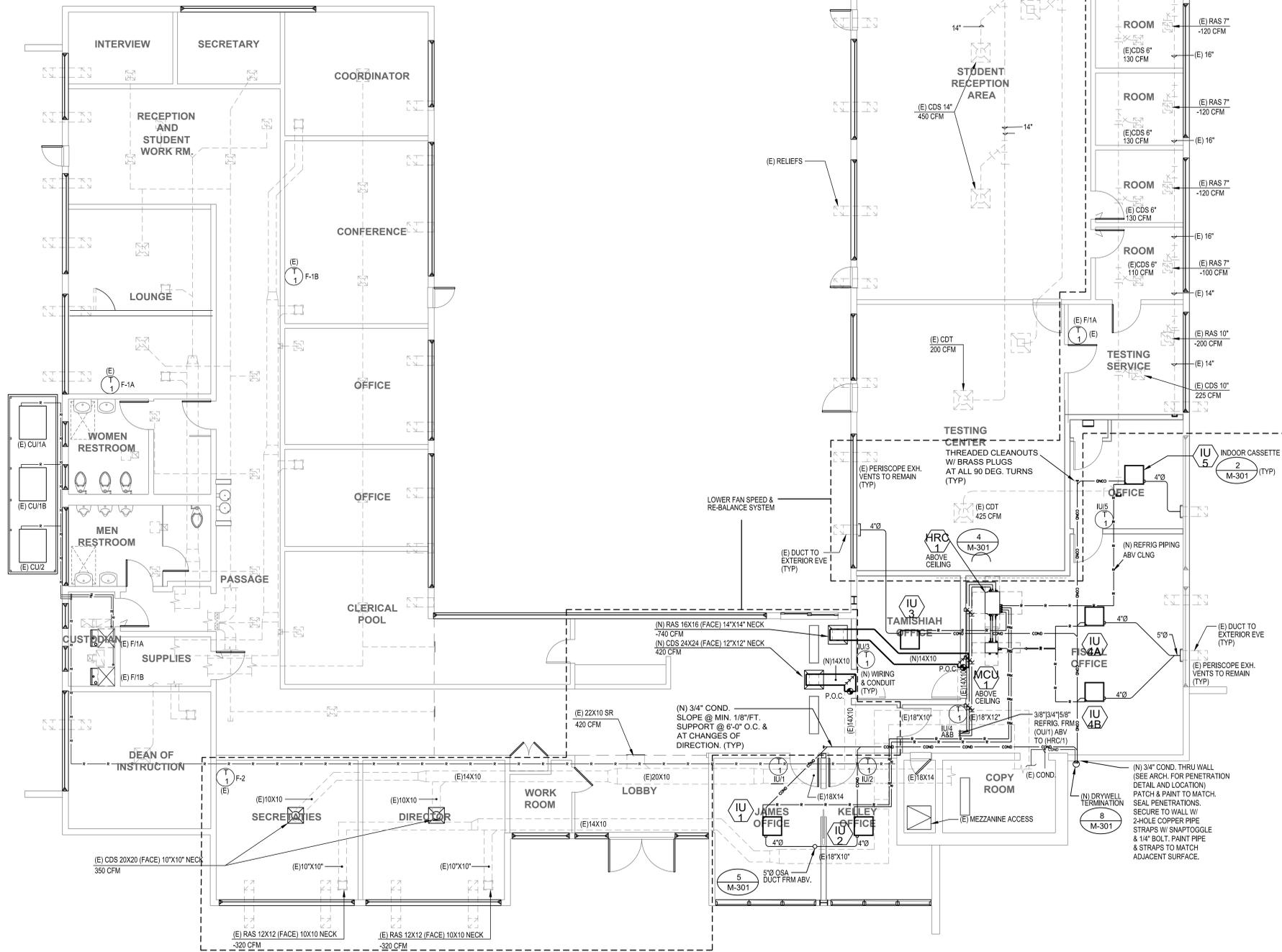
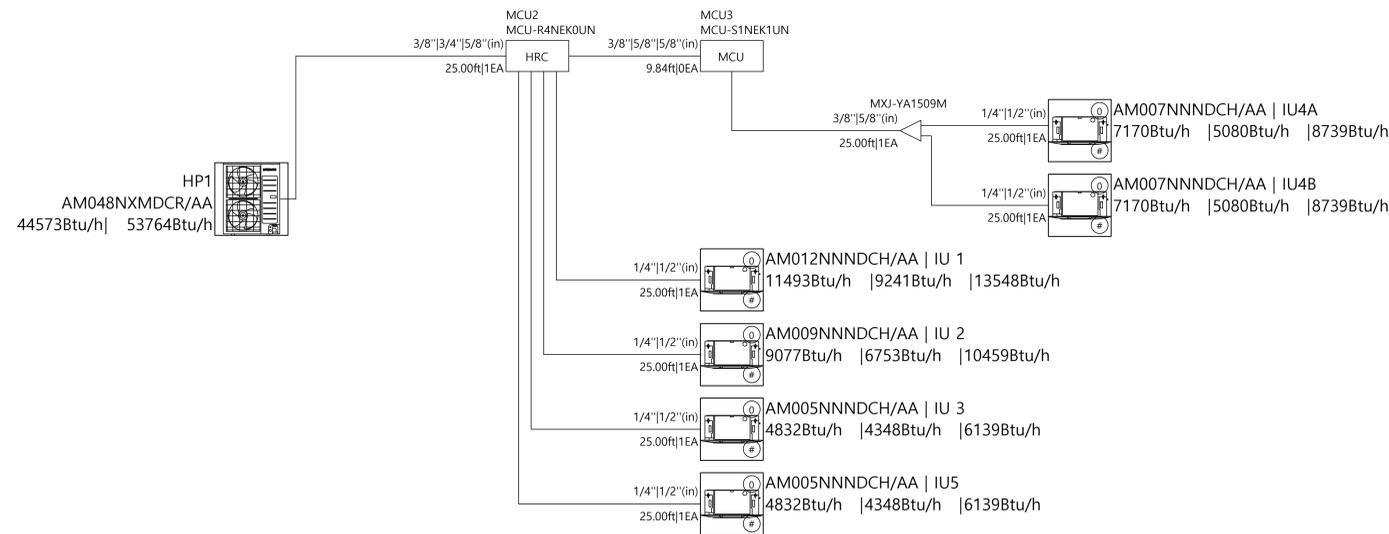
**1 ADMINISTRATION BUILDING EXISTING/DEMO MECHANICAL FLOOR PLAN**  
 SCALE: 3/16" = 1'-0"

| NO. | REVISION | DATE |
|-----|----------|------|
|     |          |      |
|     |          |      |
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|-----------------|--------------|------------|
| PROJECT MANAGER | AMH          |            |
| DRAWN BY        | TP/HM        | CHECKED BY |
| DATE            | 07/31/2025   |            |
| PROJECT NUMBER  | 3425-01-ED24 |            |
| SHEET           | M-101        |            |

100% CD



| MECHANICAL LEGEND |   |
|-------------------|---|
|                   | (E) RECTANGULAR DUCTWORK TO REMAIN        |
|                   | (E) RECTANGULAR DUCTWORK TO BE DEMOLISHED |
|                   | (E) ROUND DUCTWORK TO REMAIN              |
|                   | (E) ROUND DUCTWORK TO BE DEMOLISHED       |
|                   | (E) REFRIGERANT LINES                     |
|                   | (N) REFRIGERANT LINES                     |
|                   | EQUIPMENT TAG SEE MECH. SCHEDULE          |
|                   | P.O.C. POINT OF CONNECTION                |



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**MECHANICAL  
 FLOOR PLAN**

| NO. | REVISION | DATE |
|-----|----------|------|
|     |          |      |
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|                 |            |
|-----------------|------------|
| PROJECT MANAGER |            |
| AMH             |            |
| DRAWN BY        | CHECKED BY |
| TP/HM           | HM/RR      |
| DATE            | 07/31/2025 |
| PROJECT NUMBER  |            |
| 3425-01-ED24    |            |
| SHEET           |            |
| M-201           |            |

**1 ADMINISTRATION BUILDING MECHANICAL FLOOR PLAN**  
 M-201 SCALE: 3/16" = 1'-0"

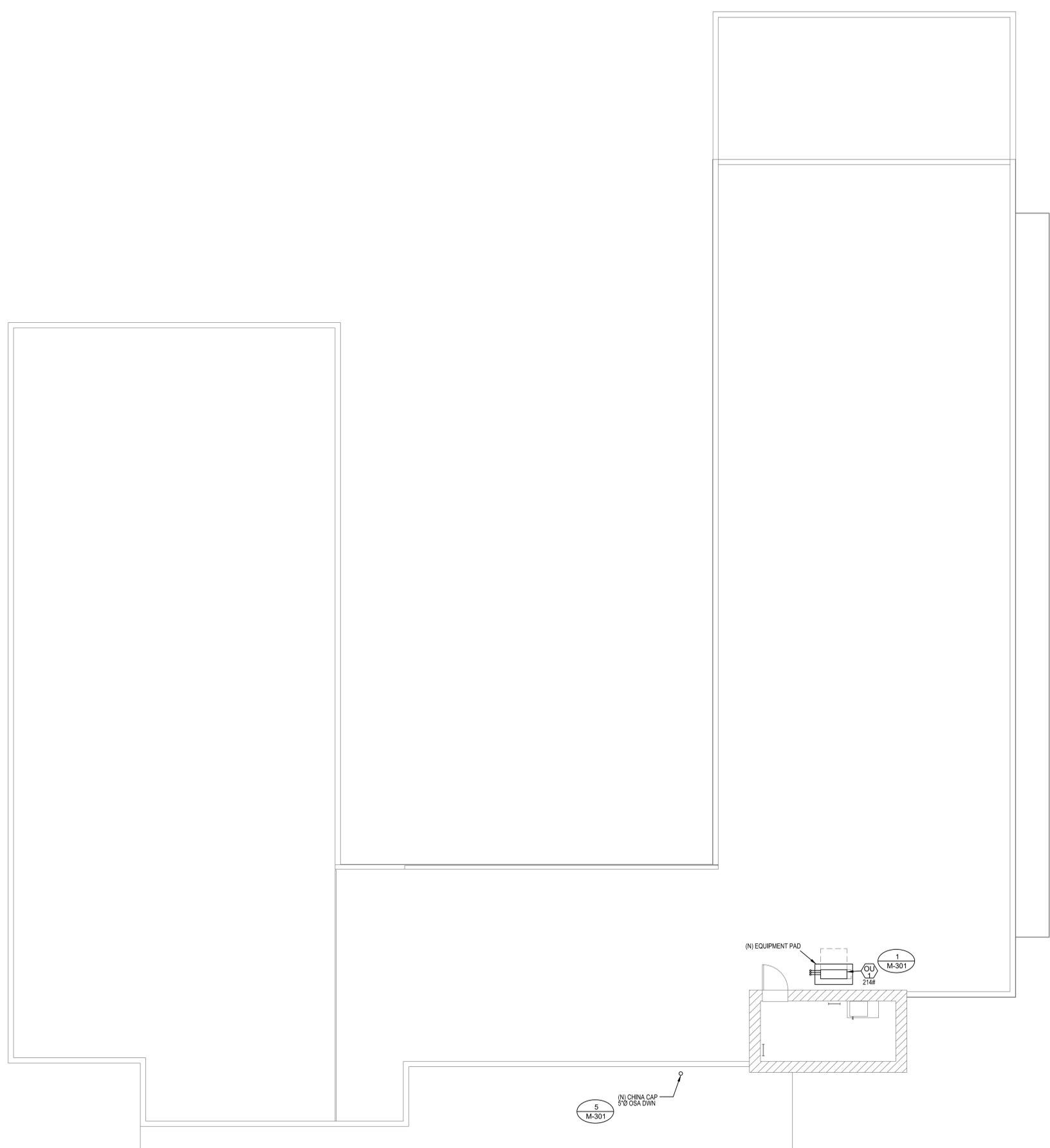
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| MECHANICAL LEGEND |   |
|-------------------|---|
|                   | (E) RECTANGULAR DUCTWORK TO REMAIN        |
|                   | (E) RECTANGULAR DUCTWORK TO BE DEMOLISHED |
|                   | (E) ROUND DUCTWORK TO REMAIN              |
|                   | (E) ROUND DUCTWORK TO BE DEMOLISHED       |
|                   | (E) REFRIGERANT LINES                     |
|                   | (N) REFRIGERANT LINES                     |
|                   | EQUIPMENT TAG SEE MECH. SCHEDULE          |
|                   | POINT OF CONNECTION                       |



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**MECHANICAL  
 ROOF PLAN**

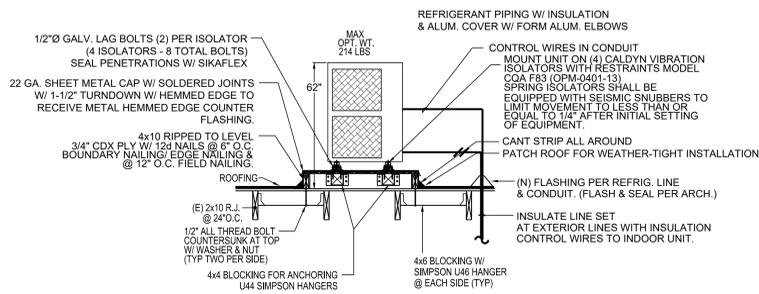
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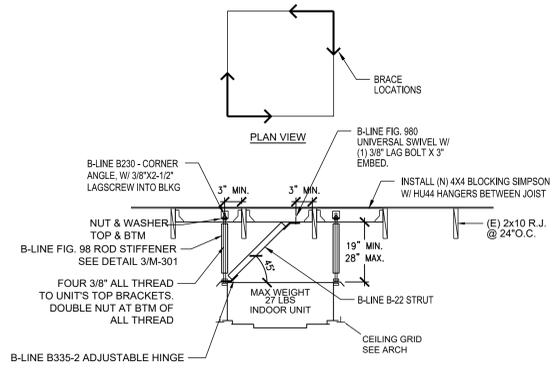
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| AMH             |            |
| DRAWN BY        | CHECKED BY |
| TP/HM           | HM/RR      |
| DATE            | 07/31/2025 |
| PROJECT NUMBER  |            |
| 3425-01-ED24    |            |
| SHEET           |            |
| M-202           |            |

**1 ADMINISTRATION BUILDING MECHANICAL ROOF PLAN**  
 M-202 SCALE: 3/16" = 1'-0"

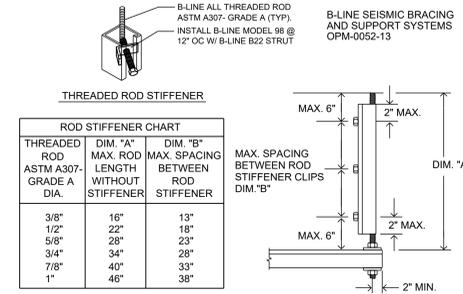
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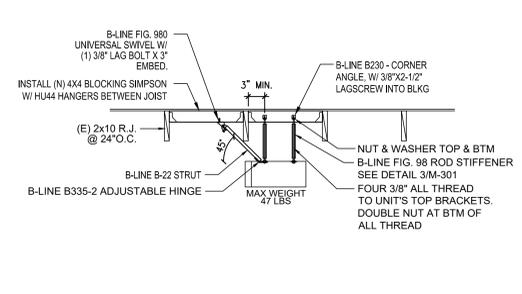
**OUTDOOR UNIT ANCHORAGE DETAIL** 1  
SCALE: NONE



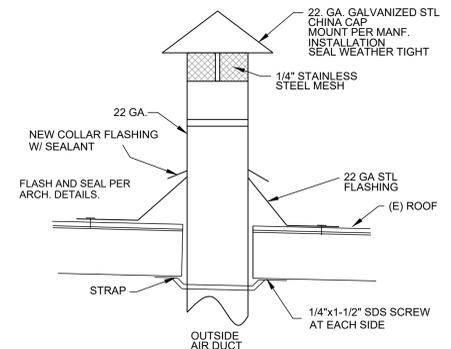
**INDOOR UNIT ANCHORAGE DETAIL** 2  
SCALE: NONE



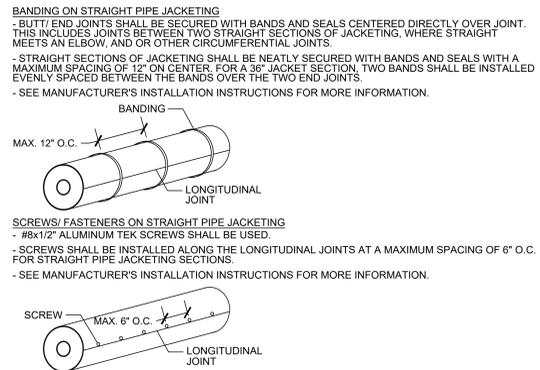
**ROD STIFFENER DETAIL** 3  
SCALE: NONE



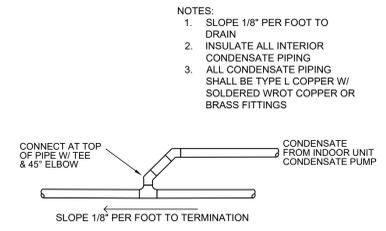
**HR CHARGER & MODE CONTROL UNIT ANCHORAGE DETAIL** 4  
SCALE: NONE



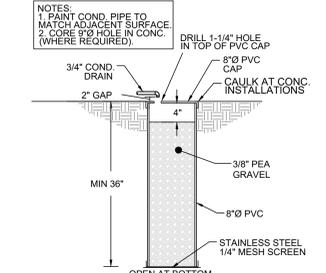
**CHINA CAP INTAKE DETAIL** 5  
SCALE: NONE



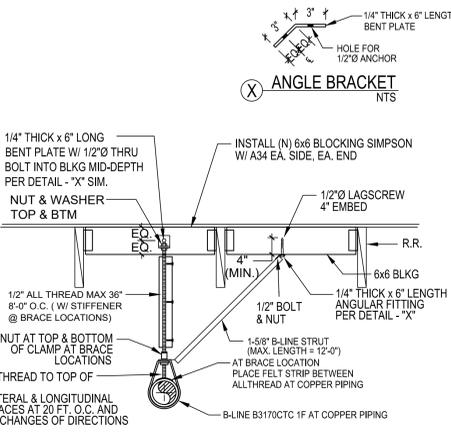
**REFRIGERANT PIPING JACKETING INSTALLATION** 6  
SCALE: NONE



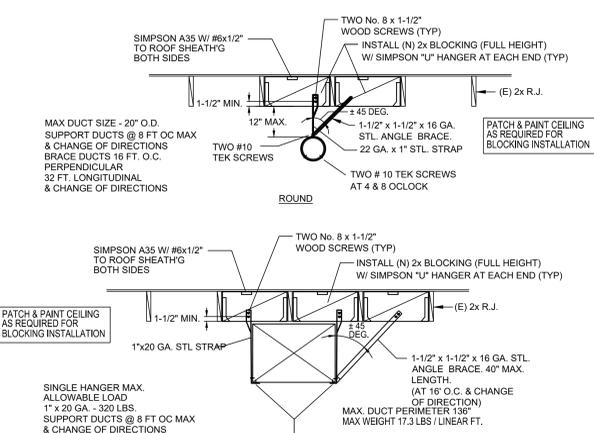
**CONDENSATE PIPING DETAILS** 7  
SCALE: NONE



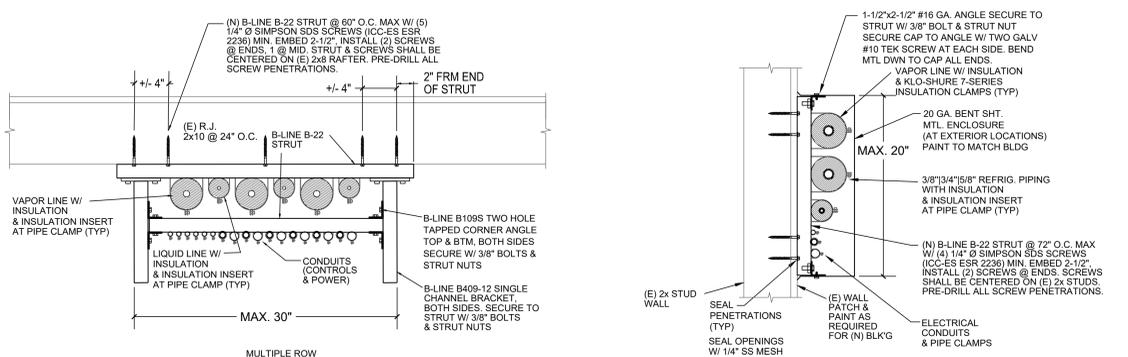
**DRYWELL DETAIL** 8  
SCALE: NONE



**CONDENSATE PIPE SUPPORT DETAILS** 8  
SCALE: NONE



**CONCEALED DUCT SUPPORT DETAILS** 9  
SCALE: NONE



**REFRIGERANT PIPE DETAILS** 10  
SCALE: NONE



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ENERGY NOTES

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STATE OF CALIFORNIA Envelope Component Approach CALIFORNIA ENERGY COMMISSION NRC-ENR-4

STATE OF CALIFORNIA Envelope Component Approach CALIFORNIA ENERGY COMMISSION NRC-ENR-4

STATE OF CALIFORNIA Envelope Component Approach CALIFORNIA ENERGY COMMISSION NRC-ENR-4

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STATE OF CALIFORNIA Envelope Component Approach CALIFORNIA ENERGY COMMISSION NRC-ENR-4

STATE OF CALIFORNIA Envelope Component Approach CALIFORNIA ENERGY COMMISSION NRC-ENR-4

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STATE OF CALIFORNIA Envelope Component Approach CALIFORNIA ENERGY COMMISSION NRC-MCH-4

STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION NRC-MCH-4

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STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION NRC-MCH-4

STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION NRC-MCH-4

Table with 3 columns: NO., REVISION, DATE. Includes project manager, drawn by, checked by, date, project number, and sheet number.



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ENERGY NOTES

SHEET 01 OF 04 (TOTAL)  
**Mechanical Systems**  
 CALIFORNIA ENERGY COMMISSION  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin. Building Report Page: (Page 6 of 10)  
 Date Prepared: 6/10/2025

**J. VENTILATION AND INDOOR AIR QUALITY**

| Room    | Space Type                       | Area (sq ft) | Supply | Return | Exhaust | Other | DCV                                   | NA: Not required per §120.116(3) |
|---------|----------------------------------|--------------|--------|--------|---------|-------|---------------------------------------|----------------------------------|
| IU/5    | Office space                     | 142          | 2      | 30     | 0       | 0     | DCV                                   | NA: Not required per §120.116(3) |
| IU/4A&B | Office space                     | 515.5        | 2      | 30     | 0       | 0     | DCV                                   | NA: Not required per §120.116(3) |
| IU/5    | Office space                     | 130          | 2      | 30     | 0       | 0     | DCV                                   | NA: Not required per §120.116(3) |
| 17      | Total System Required Min OA CFM | 150          | 18     |        |         |       | Ventilation for this System Complies? | Yes                              |

**FOOTNOTES:** System CFM should include both mechanical and natural ventilation for the same system.  
 2 Air filtration requirements apply to the following three system types per §120.116(3)(A): space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.  
 3 Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.  
 4 See standards Tables 120.1.4 and 120.1.8.  
 5 For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.  
 6 §120.21(3) requires systems serving rooms that are required by §130.11(1) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensing include offices 2500<sup>2</sup> or smaller, multipurpose rooms less than 1,000<sup>2</sup>, classrooms, conference rooms, restrooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by §130.11(1).

**K. TERMINAL BOX CONTROLS**  
 This section does not apply to this project.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance  
 Report Version: 2022.0.000  
 Schema Version: rev 20220101  
 Compliance ID: EnergyPro-2025-0625-0252  
 Report Generated: 2025-06-10 12:03:40

SHEET 02 OF 04 (TOTAL)  
**Mechanical Systems**  
 CALIFORNIA ENERGY COMMISSION  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin. Building Report Page: (Page 7 of 10)  
 Date Prepared: 6/10/2025

**L. DISTRIBUTION (DUCTWORK AND PIPING)**  
 This table is used to show compliance with mandatory pipe insulation requirements found in §120.3 and mandatory requirements found in §120.4(g) for duct sealing.

| ID | Insulation               | Weather                  | Sealing                  |
|----|--------------------------|--------------------------|--------------------------|
| 01 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Duct Leakage Testing**

| System | Test Method  | Pass |
|--------|--|------|
| OU/1   | N/A: Common Use: Duct leakage testing shall not exceed 6% per §120.3.3 required for these systems?   | No   |
|        | Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for systems? | No   |
|        | Duct leakage testing per CMC Section 603.10.1 required for these systems?  | Yes  |

The answers to the questions below apply to the following duct systems:

| ID | System | Compliance   |
|----|--------|--|
| 11 | No     | The scope of the project includes only duct systems serving healthcare facilities.   |
| 12 | No     | Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.   |
| 13 | Yes    | The space conditioning system serves less than 5,000 <sup>2</sup> of conditioned floor area.   |
| 14 | No     | The total surface area of the ducts is more than 25% of the total surface area of the entire duct system.  |
| 15 | No     | The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.  |
| 16 | No     | The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2. |
| 17 | All    | All ductwork and plenums with pressure class ratings shall be constructed to Seal Class A.   |
| 18 | All    | All ductwork is an extension of an existing duct system.   |
| 19 | All    | Ductwork serving individual dwelling unit.   |
| 20 | All    | < 25 ft of new or replacement space conditioning ducts installed.  |
| 21 | R-8    | Duct insulation R-value.   |
| 22 |        |  |
| 23 |        |  |

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance  
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SHEET 03 OF 04 (TOTAL)  
**Mechanical Systems**  
 CALIFORNIA ENERGY COMMISSION  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin. Building Report Page: (Page 8 of 10)  
 Date Prepared: 6/10/2025

**M. COOLING TOWERS**  
 This section does not apply to this project.

**N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**  
 Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at [https://www.energy.ca.gov/title24/2019standards/2019\\_compliance\\_documents/Nonresidential\\_Documents/NRCA/](https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/)

| Form Title  | Systems/Spaces to Be Field Verified |
|---|-------------------------------------|
| NRCA-MCH-01-E - Must be submitted for all buildings |                                     |

**O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**  
 Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at [https://www.energy.ca.gov/title24/2019standards/2019\\_compliance\\_documents/Nonresidential\\_Documents/NRCA/](https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/)

| Form Title   | Systems/Spaces to Be Field Verified |
|--|-------------------------------------|
| NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap. | Samung A4M8B8N8M8DCR,               |
| NRCA-MCH-11-A Automatic Demand Shed Controls   | Samung A4M8B8N8M8DCR,               |
| NRCA-MCH-16-A Supply Air Temperature Reset Controls  | Samung A4M8B8N8M8DCR,               |
| NRCA-MCH-18-A Energy Management Control Systems  | Samung A4M8B8N8M8DCR,               |

**P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**  
 There are no NRCA forms required for this project.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance  
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SHEET 04 OF 04 (TOTAL)  
**Mechanical Systems**  
 CALIFORNIA ENERGY COMMISSION  
 CERTIFICATE OF COMPLIANCE  
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**Q. MANDATORY MEASURES DOCUMENTATION LOCATION**  
 This table is used to indicate where mandatory measures are documented in the plan set or construction documentation.

| ID | Documentation Location  |
|----|---|
| 01 | Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block |
| 02 | Plan sheet or construction document location  |

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance  
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SHEET 05 OF 04 (TOTAL)  
**Mechanical Systems**  
 CALIFORNIA ENERGY COMMISSION  
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**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**  
 I certify that this Certificate of Compliance documentation is accurate and complete.

| Field                     | Value                                  |
|---------------------------|--|
| Documentation Author Name | Dany Perez                             |
| Signature Date            | 2025-06-10                             |
| Company                   | AE Group Mechanical Engineers, Inc.    |
| Address                   | 888 E. Front St.,<br>Ventura, CA 93001 |
| Phone                     | 805-653-1722                           |

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**  
 I certify the following under penalty of perjury, under the laws of the State of California:  
 The information provided on this Certificate of Compliance is true and correct.  
 I am registered under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (Responsible Designer).  
 The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1, and Part 6 of the California Code of Regulations.  
 The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.  
 I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

| Field                     | Value      |
|---------------------------|------------|
| Responsible Designer Name | Ravish Rao |
| Signature Date            | 2025-06-10 |
| Company                   |            |
| Address                   |            |
| City/State/Zip            |            |
| Phone                     |            |

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance  
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| NO. | REVISION | DATE |
|-----|----------|------|
| △   |          |      |
| △   |          |      |
| △   |          |      |
| △   |          |      |

PROJECT MANAGER  
 AMH  
 DRAWN BY  
 TP/HM  
 CHECKED BY  
 HM/RR  
 DATE  
 07/31/2025  
 PROJECT NUMBER  
 3425-01-ED24  
 SHEET  
 EN-002

100% CD



| BUS RATING: 200A 120/208V, 3PH, 4W<br>MAIN: 200A MAIN C.B.<br>SPACES: 36 FULL SIZE BOLT-ON CB SPACES |           |       |                 |     |             |      |       |           |              |         |         |                        |                        | (E) PANEL A |             |     | SURFACE MOUNT, NEMA 1<br>LOCATION: ELECTRICAL ROOM<br>WITH EQUIPMENT GND BUS |       |           |         |  |  |  |  |  |  |  |  |  |  |
|--|-----------|-------|-----------------|-----|-------------|------|-------|-----------|--------------|---------|---------|------------------------|------------------------|-------------|-------------|-----|--|-------|-----------|---------|--|--|--|--|--|--|--|--|--|--|
| CKT %VD  | DIST (FT) | NOTES | LOAD TYPE       | CKT | DESCRIPTION | TRIP | POLES | COND SIZE | CONNECTED VA |         |         | COND SIZE              | POLES                  | TRIP        | DESCRIPTION | CKT | LOAD TYPE  | NOTES | DIST (FT) | CKT %VD |  |  |  |  |  |  |  |  |  |  |
|  |           |       |                 |     |             |      |       |           | PHASE A      | PHASE B | PHASE C |                        |                        |             |             |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 1     | (E) LIGHTS      | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15                     | (E) LIGHTS             | 2           | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 3     | (E) LIGHTS      | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15                     | (E) LIGHTS             | 4           | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 5     | (E) LIGHTS      | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15                     | (E) LIGHTS             | 6           | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 7     | (E) LIGHTS      | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15                     | (E) LIGHTS             | 8           | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 9     | (E) LIGHTS      | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15                     | (E) LIGHTS             | 10          | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 11    | (E) LIGHTS      | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15                     | (E) LIGHTS             | 12          | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 13    | (E) LIGHTS      | 15  | 1           | 15   | 1     | 20        | 1            | 20      | 1       | 20                     | (E) RECEPTACLES        | 14          | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 15    | (E) LIGHTS      | 15  | 1           | 15   | 1     | 20        | 1            | 20      | 1       | 20                     | (E) RECEPTACLES        | 16          | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 17    | (E) LIGHTS      | 15  | 1           | 15   | 1     | 20        | 1            | 20      | 1       | 20                     | (E) RECEPTACLES        | 18          | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | R         | 19    | (E) RECEPTACLES | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20                     | (E) MOTOR (1) (1/2 HP) | 20          | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | R         | 21    | (E) RECEPTACLES | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20                     | (E) MOTOR (1) (1/2 HP) | 22          | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | R         | 23    | (E) RECEPTACLES | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20                     | (E) MOTOR (1) (1/2 HP) | 24          | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 25    | (E) SPARE       | 20  | 1           | 20   | 1     | 3         | 50           |         | 3       | 50                     | (E) PANEL "C"          | 26          | 1           |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 27    | (E) SPARE       | 20  | 1           | 20   | 1     | 3         | 50           |         | 3       | 50                     |                        | 28          | 1           |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 29    | (E) SPARE       | 40  | 2           | 40   | 2     | 3         | 50           |         | 3       | 50                     |                        | 30          | 1           |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 31    |                 | 2   | 2           | 2    | 1     | 40        |              | 1       | 40      | (E) GATHOOD RECEPTACLE | 32                     | 1           |             |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 33    | (E) MARQUE SIGN | 30  | 2           | 30   | 2     | 1         | 20           |         | 1       | 20                     | (E) SPARE              | 34          | 1           |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 35    |                 | 2   | 2           | 2    | 1     | 20        |              | 1       | 20      | (E) SPARE              | 36                     | 1           |             |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |

|       |      |      |      |
|-------|------|------|------|
| CON:  | 7500 | 7450 | 7610 |
| 25%:  | 1213 | 1200 | 1240 |
| SUB:  | 0    | 0    | 0    |
| TOT:  | 8713 | 8650 | 8850 |
| AMPS: | 73   | 72   | 74   |

LOAD (VA) LOAD TYPE LEGEND  
540 R RECEPTACLE  
14610 L LIGHTING (125% OF CONNECTED LOAD CEC 215.2)  
0 M MECHANICAL  
0 K KITCHEN APPLANCE  
2550 N NON-CONTINUOUS MISC.  
0 C CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

| BUS RATING: 200A 120/208V, 3PH, 4W<br>MAIN: MAIN LUGS ONLY<br>SPACES: 42 FULL SIZE BOLT-ON CB SPACES |           |       |                             |     |             |      |       |           |              |         |         |           |                         | (E) PANEL B |             |     | SURFACE MOUNT, NEMA 1<br>LOCATION: OUTSIDE MENS RR<br>WITH EQUIPMENT GND BUS |       |           |         |  |  |  |  |  |  |  |  |  |  |
|--|-----------|-------|-----------------------------|-----|-------------|------|-------|-----------|--------------|---------|---------|-----------|-------------------------|-------------|-------------|-----|--|-------|-----------|---------|--|--|--|--|--|--|--|--|--|--|
| CKT %VD  | DIST (FT) | NOTES | LOAD TYPE                   | CKT | DESCRIPTION | TRIP | POLES | COND SIZE | CONNECTED VA |         |         | COND SIZE | POLES                   | TRIP        | DESCRIPTION | CKT | LOAD TYPE  | NOTES | DIST (FT) | CKT %VD |  |  |  |  |  |  |  |  |  |  |
|  |           |       |                             |     |             |      |       |           | PHASE A      | PHASE B | PHASE C |           |                         |             |             |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 1     | (E) LIGHTS                  | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15        | (E) LIGHTS              | 2           | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 3     | (E) LIGHTS                  | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15        | (E) LIGHTS              | 4           | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 5     | (E) LIGHTS                  | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15        | (E) LIGHTS              | 6           | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 7     | (E) LIGHTS                  | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15        | (E) LIGHTS              | 8           | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 9     | (E) LIGHTS                  | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15        | (E) LIGHTS              | 10          | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | L         | 11    | (E) LIGHTS                  | 15  | 1           | 15   | 1     | 15        | 1            | 15      | 1       | 15        | (E) LIGHTS              | 12          | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | R         | 13    | (E) RECEPTACLES             | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) RECEPTACLES         | 14          | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | R         | 15    | (E) RECEPTACLES             | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) RECEPTACLES         | 16          | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 17    | (E) SPARE                   | 15  | 1           | 15   | 1     | 20        | 1            | 20      | 1       | 20        | (E) RECEPTACLES         | 18          | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 19    | (E) SPARE                   | 15  | 1           | 15   | 1     | 20        | 1            | 20      | 1       | 20        | (E) RECEPTACLES         | 20          | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | R         | 21    | (E) RECEPTACLES             | 15  | 1           | 15   | 1     | 2         | 20           |         | 2       | 20        | (E) WATER HEATER        | 20          | M           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | R         | 23    | (E) RECEPTACLES             | 20  | 1           | 20   | 1     | 2         | 20           |         | 2       | 20        |                         | 22          | M           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | R         | 25    | (E) RECEPTACLES & TIMECLOCK | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) MOTOR (1) (1/2 HP)  | 24          | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | R         | 27    | (E) WALL HEATERS            | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) MOTOR (1) (1/2 HP)  | 26          | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 29    | (E) WALL HEATERS            | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) SPARE               | 28          | 1           |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 31    | (E) SPARE                   | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) SPARE               | 30          | 1           |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 33    | (E) REC ALL                 | 20  | 1           | 20   | 1     | 3         | 40           |         | 3       | 40        | (E) KITCHEN UNIT, STOVE | 32          | K           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 35    | (E) REC ALL                 | 20  | 1           | 20   | 1     | 3         | 40           |         | 3       | 40        |                         | 34          | K           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 2  |           | 37    | (E) SPARE                   | 20  | 1           | 20   | 1     | 3         | 40           |         | 3       | 40        |                         | 36          | K           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 2  |           | 39    | (E) SPARE                   | 20  | 1           | 20   | 1     | 3         | 40           |         | 3       | 40        |                         | 38          | K           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 2  |           | 41    | (E) SPARE                   | 20  | 1           | 20   | 1     | 3         | 40           |         | 3       | 40        |                         | 40          | K           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 2  |           | 43    | (E) SPARE                   | 20  | 1           | 20   | 1     | 3         | 40           |         | 3       | 40        |                         | 42          | K           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |

|       |       |       |       |
|-------|-------|-------|-------|
| CON:  | 11550 | 12070 | 11100 |
| 25%:  | 684   | 923   | 863   |
| SUB:  | 0     | 0     | 0     |
| TOT:  | 12438 | 12993 | 11963 |
| AMPS: | 104   | 108   | 100   |

LOAD (VA) LOAD TYPE LEGEND  
6630 R RECEPTACLE  
10890 L LIGHTING (125% OF CONNECTED LOAD CEC 215.2)  
2550 M MECHANICAL  
8600 K KITCHEN APPLANCE  
1700 N NON-CONTINUOUS MISC.  
0 C CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

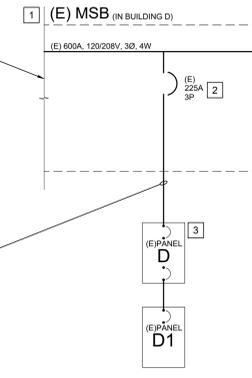
| BUS RATING: 50A 120/208V, 3PH, 4W<br>MAIN: MAIN LUGS ONLY<br>SPACES: 12 FULL SIZE BOLT-ON CB SPACES |           |       |                               |     |             |      |       |           |              |         |         |           |                              | (E) PANEL C |             |     | SURFACE MOUNT, NEMA 1<br>LOCATION: ELECTRICAL ROOM<br>WITH EQUIPMENT GND BUS |       |           |         |  |  |  |  |  |  |  |  |  |  |
|---|-----------|-------|-------------------------------|-----|-------------|------|-------|-----------|--------------|---------|---------|-----------|------------------------------|-------------|-------------|-----|--|-------|-----------|---------|--|--|--|--|--|--|--|--|--|--|
| CKT %VD   | DIST (FT) | NOTES | LOAD TYPE                     | CKT | DESCRIPTION | TRIP | POLES | COND SIZE | CONNECTED VA |         |         | COND SIZE | POLES                        | TRIP        | DESCRIPTION | CKT | LOAD TYPE  | NOTES | DIST (FT) | CKT %VD |  |  |  |  |  |  |  |  |  |  |
|   |           |       |                               |     |             |      |       |           | PHASE A      | PHASE B | PHASE C |           |                              |             |             |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1   |           | 1     | (E) TO EXIST WIRES            | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) COPPER                   | 2           | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1   |           | 3     | (E) THRU LARGE                | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) COPPER                   | 4           | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1   |           | 5     | (E) PANEL W LEFT              | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) FIRE ALARM CONTROL PANEL | 6           | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1   | R         | 7     | (E) RECEPT WALL BY FLOOR DUCT | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) COPPER                   | 8           | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1   | N         | 9     | (E) AUTO SLIDE DOORS          | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) COPPER                   | 10          | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1   |           | 11    | ?                             | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20        | (E) COPPER                   | 12          | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |

|       |   |   |   |
|-------|---|---|---|
| CON:  | 0 | 0 | 0 |
| 25%:  | 0 | 0 | 0 |
| SUB:  | 0 | 0 | 0 |
| TOT:  | 0 | 0 | 0 |
| AMPS: | 0 | 0 | 0 |

LOAD (VA) LOAD TYPE LEGEND  
0 R RECEPTACLE  
0 L LIGHTING (125% OF CONNECTED LOAD CEC 215.2)  
0 M MECHANICAL  
0 K KITCHEN APPLANCE  
0 N NON-CONTINUOUS MISC.  
0 C CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

LEVEL 2 LOAD SUMMARY STATEMENT:  
EXISTING ELECTRICAL SERVICE HAS BEEN INVESTIGATED AND FOUND TO HAVE ADEQUATE CAPACITY FOR THE PROPOSED LOAD ADDITION AS SHOWN ON THESE PLANS.  
JEFFREY M. THOMA, PE DATE: JUNE 19, 2025

|                         |                    |
|-------------------------|--------------------|
| LEVEL 1 PANEL "D"       | 225A, 208/120V, 3Ø |
| 30-DAY LOAD RECORDING   | 28.0A              |
| ENDING ON 06/09/25      |                    |
| 25% CEC SAFETY FACTOR   | 7.0A               |
| TOTAL PEAK DEMAND LOAD  | 35.0A              |
| REMOVED LOAD            | <3.0A>             |
| ADDED LOAD              |                    |
| - LIGHTS                | 10.0A              |
| - PLUGS                 | 25.5A              |
| - MECHANICAL EQ.        | 34.4A              |
| SUB-TOTAL ADDED LOAD    | 69.9A              |
| TOTAL PANEL CALC. LOAD: | 101.9A             |



- ### REFERENCE NOTES
- EXISTING 600A, 120/208V, 3Ø, 4W SWITCHGEAR, LOCATED IN BUILDING "D", TO REMAIN.
  - EXISTING 225A CIRCUIT BREAKER, TO REMAIN.
  - EXISTING PANEL "D", 225A, 120/208V, 3Ø, 4W, IN ADMIN BUILDING, TO REMAIN. REFER TO PANEL SCHEDULE FOR FURTHER INFORMATION.
  - PANEL SCHEDULES FOR EXISTING PANELS "A", "B" AND "C" SHOWN FOR REFERENCE ONLY. NO CHANGE IN LOADS.
  - EXISTING, PARTIAL SINGLE LINE DIAGRAM, SHOWN FOR REFERENCE ONLY.
  - PROJECT WORK RESULTS IN NET REDUCTION IN LOAD ON PANEL.

| BUS RATING: 225A 120/208V, 3PH, 4W<br>MAIN: 225A MAIN C.B.<br>SPACES: 42 FULL SIZE BOLT-ON CB SPACES |           |       |                   |   |             |      |       |           |              |         |         |                   |                            | (E) PANEL D |             |     | SURFACE MOUNT, NEMA 1<br>LOCATION: MECHANICAL ROOM<br>WITH EQUIPMENT GND BUS |       |           |         |  |  |  |  |  |  |  |  |  |  |
|--|-----------|-------|-------------------|---|-------------|------|-------|-----------|--------------|---------|---------|-------------------|----------------------------|-------------|-------------|-----|--|-------|-----------|---------|--|--|--|--|--|--|--|--|--|--|
| CKT %VD  | DIST (FT) | NOTES | LOAD TYPE         | CKT   | DESCRIPTION | TRIP | POLES | COND SIZE | CONNECTED VA |         |         | COND SIZE         | POLES                      | TRIP        | DESCRIPTION | CKT | LOAD TYPE  | NOTES | DIST (FT) | CKT %VD |  |  |  |  |  |  |  |  |  |  |
|  |           |       |                   |   |             |      |       |           | PHASE A      | PHASE B | PHASE C |                   |                            |             |             |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | M         | 1     | (E) CONDENSER "A" | 40  | 3           | 3    | 1     | 20        | 1            | 20      | 1       | 20                | (E) RECEPTACLES            | 2           | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | M         | 3     |                   | 3   | 3           | 3    | 1     | 20        | 1            | 20      | 1       | 20                | (E) RECEPTACLES            | 4           | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | M         | 5     |                   | 3   | 3           | 3    | 1     | 20        | 1            | 20      | 1       | 20                | (E) RECEPTACLES            | 6           | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | M         | 7     | (E) CONDENSER "B" | 40  | 3           | 3    | 1     | 20        | 1            | 20      | 1       | 20                | (E) SPARE                  | 8           | 1           |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | M         | 9     |                   | 3   | 3           | 3    | 1     | 20        | 1            | 20      | 1       | 20                | (E) SPARE                  | 10          | 1           |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | M         | 11    |                   | 3   | 3           | 3    | 1     | 20        | 1            | 20      | 1       | 20                | (E) MECHANICAL ROOM LIGHT  | 12          | L           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 0.47%  | 25        | 3     | M 13              | (N) OU-1, OUTDOOR UNIT                                  | 50          | 2    | 8     | 3016      | 1            | 20      | 1       | 20                | (E) FA                     | 14          | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 0.47%  | 25        | 3     | M 15              |   | 2           | 8    | 3016  | 1         | 20           | 1       | 20      | (E) FURNACE "A"   | 16                         | M           | 1           |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 0.30%  | 125       | 3     | M 17              | (N) IU-1, IU-2, IU-3, IU-4A, IU-4B & IU-5, INDOOR UNITS | 15          | 2    | 12    | 152       | 1            | 20      | 1       | 20                | (E) FURNACE "B"            | 18          | M           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 0.30%  | 125       | 3     | M 19              |   | 2           | 12   | 152   | 1         | 20           | 1       | 20      | (E) SPARE         | 20                         | 1           |             |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 0.89%  | 135       | 3     | M 21              | (N) MCU-1, MODE CONTROL UNIT, MISC-1                    | 15          | 2    | 12    | 416       | 1            | 20      | 1       | 20                | (E) OUTDOOR GFI RECEPTACLE | 22          | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 0.89%  | 135       | 3     | M 23              |   | 2           | 12   | 416   | 1         | 20           | 1       | 20      | (E) HVAC CONTROLS | 24                         | M           | 1           |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 25    | (E) SPARE         | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20                | (E) RECEPTACLES            | 26          | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 2.48%  | 125       | 3     | R 27              | (N) OFFICES RECEPTACLES                                 | 20          | 1    | 12    | 720       | 1            | 20      | 1       | 20                | (E) RECEPTACLES            | 28          | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 2.70%  | 130       | 3     | L 29              | (N) ADMIN BLDG REMODEL LIGHTS                           | 20          | 1    | 10    | 1204      | 1            | 20      | 1       | 20                | (E) RECEPTACLES            | 30          | R           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  |           | 31    | (E) SPARE         | 20  | 1           | 20   | 1     | 20        | 1            | 20      | 1       | 20                | (E) COPPER (ANNON)         | 32          | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 2.77%  | 140       | 3     | R 33              | (N) FISCAL OFFICE RECEPTACLES                           | 20          | 1    | 12    | 720       | 1            | 20      | 1       | 20                |                            | 34          | N           | 1   |  |       |           |         |  |  |  |  |  |  |  |  |  |  |
| 1.68%  | 85        | 3     | R 35              | (N) OFFICE 4 RECEPTACLES                                | 20          | 1    | 12    | 720       | 10           | 1       | 20      | 1000              | (N) COPPER                 | 36          | N           | 3   | 130  | 2.24% |           |         |  |  |  |  |  |  |  |  |  |  |
| 1  | N         | 37    | (E) PANEL "D1"    | 100   | 3           | 3    | 1     | 20        | 1            | 20      | 1       | 20                | (E) SPARE</                |             |             |     |  |       |           |         |  |  |  |  |  |  |  |  |  |  |

**LUMINAIRE SCHEDULE**

FOR VENTURA COLLEGE, ADMIN BLDG RE-MODEL

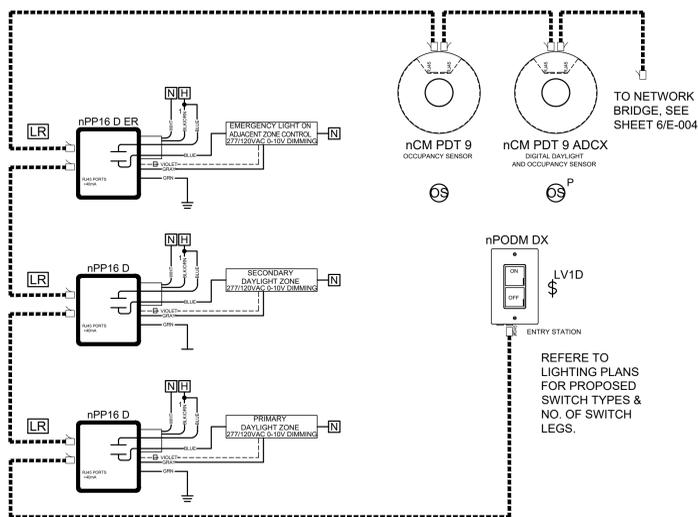
TE# 25-8028

| TYPE | ILLUSTRATION | MANUFACTURER      | CATALOG NUMBER  | VOLTAGE | TOTAL INPUT WATTS (W) | LAMP TYPE | NOMINAL LUMEN OUTPUT (L) | LAMP COLOR TEMP (K) | MOUNTING TYPE | DESCRIPTION   | REMARKS                             |
|------|--------------|-------------------|---|---------|-----------------------|-----------|--------------------------|---------------------|---------------|---|-------------------------------------|
| A1   |              | LITHONIA LIGHTING | ZBLT4-40L-ADP-GZ10-LP835-WH                                       | 120/277 | 31                    | LED       | 4197                     | 3500                | RECESSED      | 2'x4' RECESSED LED TROFFER WITH CURVED, RIBBED DIFFUSER, DRYWALL GRID ADAPTER AND 0-10V DIMMING                     | PROVIDE DRYWALL GRID ADAPTER, 'DGA' |
| A2   |              | LITHONIA LIGHTING | ZBLT2-33L-ADP-GZ10-LP835-WH                                       | 120/277 | 27                    | LED       | 3300                     | 3500                | RECESSED      | 2'x2' RECESSED LED TROFFER WITH CURVED, RIBBED DIFFUSER, AND 0-10V DIMMING  |                                     |
| A2D  |              | LITHONIA LIGHTING | ZBLT2-33L-ADP-GZ10-LP835-WH                                       | 120/277 | 27                    | LED       | 3300                     | 3500                | RECESSED      | 2'x2' RECESSED LED TROFFER WITH CURVED, RIBBED DIFFUSER, DRYWALL GRID ADAPTER AND 0-10V DIMMING                     | PROVIDE DRYWALL GRID ADAPTER, 'DGA' |
| B1   |              | LITHONIA LIGHTING | STL4-48L-GZ10-LP835   | 120/277 | 35                    | LED       | 3834                     | 3500                | SURFACE       | 1'x4' LED SURFACE MOUNT LUMINAIRE WITH 0-10V DIMMING TO 10% AND WHITE FINISH  |                                     |
| D1   |              | LITHONIA LIGHTING | LDN6-39/15-L06-AR-LSS-TRW-MVOLT-GZ10<br>LRP-1-RW-TBD-120/277-EL N | 120/277 | 18                    | LED       | 1514                     | 3500                | RECESSED      | 6" DIAMETER, LED DOWNLIGHT WITH 0-10V DIMMING TO 10%, CLEAR TRIM WITH SEMI-SPECULAR FINISH AND WHITE PAINTED FLANGE |                                     |
| X1   |              | LITHONIA LIGHTING | LRP-1-RW-TBD-120/277-EL N   | 120/277 | 3                     | LED       | N/A                      | N/A                 | SURFACE       | SINGLE FACE EXIT SIGN WITH RED LETTERS ON WHITE BACKGROUND WITH 90 MINUTE BATTERY BACK UP                           |                                     |

- NOTES**
- LUMINAIRE SUPPLIED VOLTAGE TO BE VERIFIED BY ELECTRICAL CONTRACTOR.
  - STANDARD, NON-PREMIUM FINISHES TO BE VERIFIED WITH ARCHITECT PRIOR TO ORDER.

**1 LUMINAIRE SCHEDULE**

NTS



**LIGHTING CONTROLS SYMBOL LEGEND**

| SYMBOL | PRODUCT # (LIGHT U.O.N.) | DESCRIPTION   |
|--------|--------------------------|---|
| LV1D   | nPOD DX                  | 1 CHANNEL ON/OFF TOGGLE WITH DIMMING LOW VOLTAGE, ON / OFF / RAISE / LOWER CONTROL                      |
| LRW    | nPP16 D                  | 15 AMP RELAY PACK WITH 0-10V DIMMING CONTROL, CHASE NIPPLE MOUNTING                                     |
| RR     | nPP20 PL T24             | 20 AMP RELAY PACK FOR PLUG LOAD CONTROL, CHASE NIPPLE MOUNTING  |
| OS     | nCM PDT 9                | STANDARD RANGE 30" SENSOR/CEILING MOUNT, LOW VOLTAGE, DUAL TECHNOLOGY (PDT), DAYLIGHT, OCCUPANCY SENSOR |
| OS     | nCM PDT 9 ACIX           | STANDARD RANGE 30" SENSOR/CEILING MOUNT, LOW VOLTAGE, DUAL TECHNOLOGY (PDT), DAYLIGHT, OCCUPANCY SENSOR |
| nBRG8  | BRIDGE KIT, nB8          | SYSTEM NETWORK BRIDGE, 8-PORT   |
| C5-W-C |                          | CAT 5E CABLEING, WHITE COLOR  |

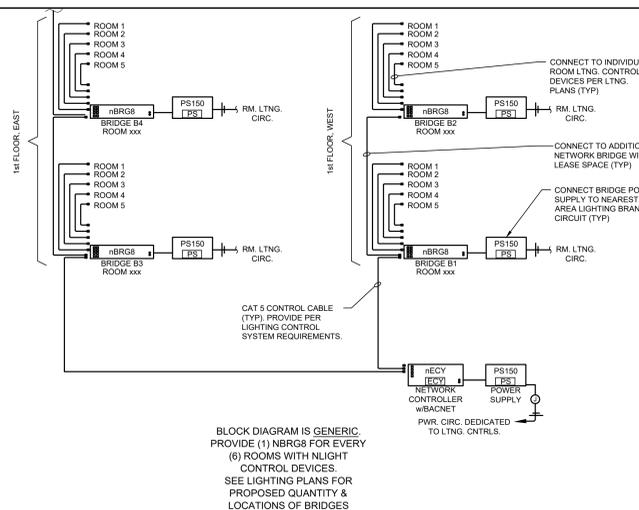
- NOTES:**
- VERIFY QUANTITY OF DEVICES REQUIRED TO PROVIDE COMPLETE COVERAGE AND CONTROL PER ROOM DIMENSIONAL REQUIREMENTS AND CONTROL FUNCTIONS SHALL SHOWN ON LIGHTING PLANS AND POWER PLANS.
  - PROVIDE A SHOP DRAWING OF THE BUILDING FLOOR PLANS WITH LAYOUT OF CONTROL DEVICES.

**GENERAL NOTES**

- LIGHTING CONTROL NETWORK SYSTEM BASIS OF DESIGN IS ACUTY LIGHT ENGINEER AND OWNER APPROVED EQUAL SYSTEMS THAT ARE T24 ENERGY COMPLIANT WILL BE ACCEPTABLE.
- QUANTITY AND LOCATION OF ALL SENSORS ARE SHOWN FOR DESIGN INTENT. LIGHTING CONTROL MANUFACTURER SHALL SUBMIT COMPLETE SHOP DRAWING SHOWING PREFERRED LOCATION AND QUANTITY OF SENSORS REQUIRED FOR OPTIMUM SYSTEM PERFORMANCE.
- PROVIDE OCCUPANCY SENSOR, WALL OR CEILING MOUNTED AS SHOWN ON THIS PLAN WITH TYPE AND MODEL THAT CAN ACCOMMODATE THE SPACE REQUIREMENT FOR THE ROOM OR AREA.
- FOR THE LIGHTING CONTROL SYSTEM, OPEN CABLE INSTALLATION OF CAT 5E IN ACCESSIBLE CEILING SPACE IS ACCEPTABLE. CONDUIT SLEEVES SHALL BE PROVIDED AT ANY AREAS WITH INACCESSIBLE OR HARD TO REACH CEILING. CAT 5E CABLES SHALL BE WHITE IN COLOR.
- OPEN CABLE INSTALLATION OF CAT 5E IN ACCESSIBLE CEILING SPACE SHALL BE INSTALLED IN AN ORGANIZED WORKMAN LIKE MANNER WITH J-HOOKS AND/OR CABLE SUPPORTS AT 8FT O.C. MAXIMUM.
- 0-10V CONTROL CABLE SHALL BE 600V RATED #18 THWN CU, OR AS PER LIGHTING CONTROL MANUFACTURERS REQUIREMENTS. INSTALLED IN LIGHTING BRANCH CIRCUIT CONDUITS.
- LOCATE CONTROL RELAYS ABOVE CEILING IN A CONSISTENT MANNER AT EACH ROOM TYPE. TYPICALLY LOCATE THE RELAYS ABOVE THE LIGHTING CONTROL SWITCHES.
- PROVIDE USERS WITH LIGHTING CONTROL SYSTEM SENSORVIEW (OR APPROVED EQUAL) SOFTWARE ACCESS.
- PROVIDE OWNER USERS WITH 4-HOUR TRAINING SESSION OF LIGHTING CONTROL SYSTEM FUNCTIONALITY, SYSTEM SETTINGS, DEMONSTRATE PROGRAMMING OF THE PROJECT SYSTEM, AVAILABLE ADJUSTMENTS, ETC. PROVIDE A FOLLOW UP TRAINING SESSION WITHIN 12-MONTHS AFTER OWNER TAKES OCCUPANCY OF BLDG.

**4 LIGHTING CONTROL: LARGE ROOM**

NTS



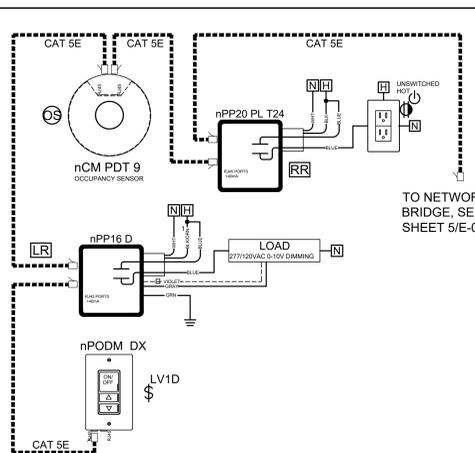
BLOCK DIAGRAM IS GENERIC. PROVIDE (1) nBRG8 FOR EVERY (6) ROOMS WITH NLIGHT CONTROL DEVICES. SEE LIGHTING PLANS FOR PROPOSED QUANTITY & LOCATIONS OF BRIDGES

**5 BLOCK DIAGRAM: INT. LTG CONTROL SYSTEM NETWORK**

NTS

**2 LIGHTING CONTROL SYMBOL LEGEND**

NTS



**3 LIGHTING CONTROL: TYP. SMALL TO MEDIUM SIZE ROOM**

NTS

DSA FILE #: 00-00  
PROJECT TRACKING #: 0000-00



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ca@thomaelectric.com  
THOMA #25-8028

VENTURA COLLEGE ADMIN BLDG  
ALTERATION

4667 TELEGRAPH RD., VENTURA, CA, 93003

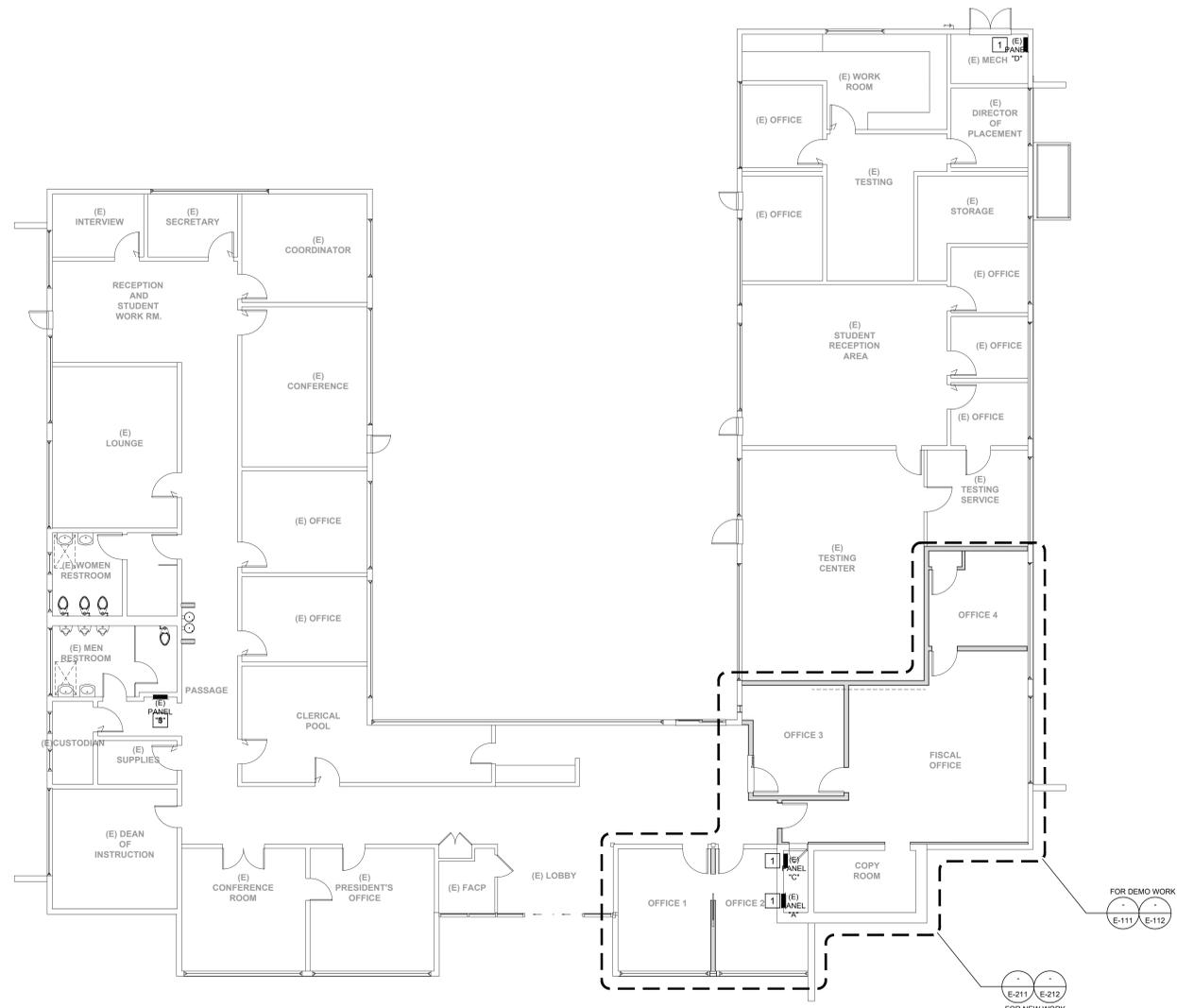
LUMINAIRE SCHEDULE AND  
CONTROL DIAGRAMS

| NO. | REVISION | DATE |
|-----|----------|------|
|     |          |      |
|     |          |      |
|     |          |      |
|     |          |      |

PROJECT MANAGER  
J.M.  
DRAWN BY  
J.M.  
CHECKED BY  
J.M.  
DATE  
06/22/2025  
PROJECT NUMBER  
3425-01-ED24  
SHEET  
E-003

**REFERENCE NOTES**

- EXISTING BRANCH CIRCUIT PANELBOARDS, TO REMAIN, TYP.



**OVERALL ELECTRICAL FLOOR PLAN**  
 SCALE: 1/8" = 1'-0"  
 NORTH

DSA FILE #: 00-00  
 PROJECT TRACKING #: 00000-00



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**VENTURA COLLEGE ADMIN BLDG  
 ALTERATION**

4667 TELEGRAPH RD., VENTURA, CA 93003

**OVERALL ELECTRICAL  
 FLOOR PLAN**

| NO. | REVISION | DATE |
|-----|----------|------|
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| △   |          |      |
| △   |          |      |

PROJECT MANAGER  
 JM  
 DRAWN BY  
 JM  
 CHECKED BY  
 -  
 DATE  
 06/22/2025  
 PROJECT NUMBER  
 3425-01-ED24  
 SHEET  
 E-101



**REFERENCE NOTES**

1. EC SHALL PROVIDE TEMPORARY SUPPORT FOR EXISTING, WALL MOUNTED, LOW VOLTAGE COMMUNICATIONS EQUIPMENT WHILE EXISTING WALL TO BE DEMOLISHED AND RE-BUILT IN PLACE FROM FLOOR TO DECK ABOVE. EC SHALL PROVIDE SIMILAR TEMPORARY SUPPORT FOR DUPLEX RECEPTACLE IN ADJACENT WALL FOR SAME PURPOSE. LOW VOLTAGE EQUIPMENT DOWNTIME TO BE AS MINIMAL AS FEASIBLE. OUTAGES TO BE COORDINATED WITH OWNER, MINIMUM 48 HOUR NOTICE PROVIDED TO OWNER.
2. EC SHALL DISCONNECT AND REMOVE EXISTING DEVICE AND PULL WIRING/CABLES BACK TO POINT OF ORIGIN AND REMOVE. EXISTING, ASSOCIATED SURFACE MOUNTED RACEWAY(S) TO BE REMOVED WITH DEVICE(S). EC SHALL UPDATE PANEL SCHEDULE(S) WHEN CIRCUITS ARE NO LONGER IN USE AS SPARE. REMAINING DEVICES ARE EXISTING TO REMAIN U.O.N. EC SHALL MAINTAIN CIRCUIT INTEGRITY FOR EXISTING DEVICES.
3. EC SHALL DISCONNECT AND REMOVE EXISTING DEVICE, EXISTING, ASSOCIATED SURFACE MOUNTED RACEWAYS TO BE REMOVED AND REPLACED WITH IN-WALL CONDUITS. EC SHALL PULL EXISTING CONDUCTORS INTO NEW CONDUIT AND RE-CONNECT NEW DEVICE TO EXISTING BRANCH CIRCUIT. EC SHALL MAINTAIN CIRCUIT INTEGRITY FOR EXISTING DEVICES.



**ELECTRICAL DEMOLITION FLOOR PLAN**  
 SCALE: 1/4" = 1'-0"  
 NORTH

DSA FILE #: 00-00  
 PROJECT TRACKING #: 00000-00



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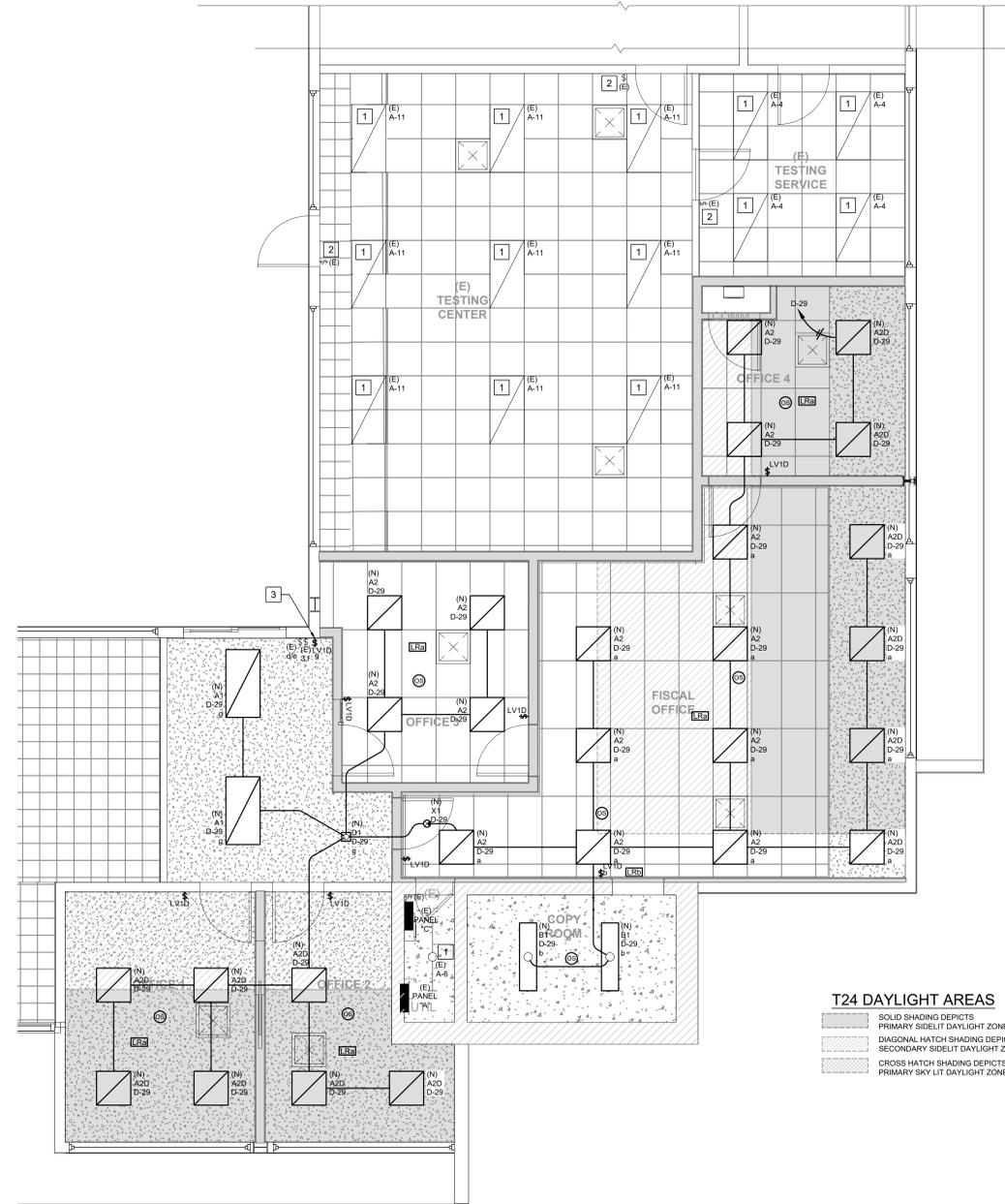
**VENTURA COLLEGE ADMIN BLDG  
 ALTERATION**  
 4667 TELEGRAPH RD., VENTURA, CA, 93003  
**DEMOLITION ELECTRICAL  
 FLOOR PLAN**

| NO. | REVISION | DATE |
|-----|----------|------|
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| △   |          |      |
| △   |          |      |
| △   |          |      |
| △   |          |      |

|                 |              |
|-----------------|--------------|
| PROJECT MANAGER |              |
| JM              |              |
| DRAWN BY        | CHECKED BY   |
| JM              |              |
| DATE            | 06/22/2025   |
| PROJECT NUMBER  | 3425-01-ED24 |
| SHEET           | E-112        |

**REFERENCE NOTES**

- EXISTING LUMINAIRES TO REMAIN.
- EXISTING LIGHTING CONTROLS, TO REMAIN.
- PROVIDE 3 GANG SWITCH J-BOX TO ACCOMMODATE NEW LOW VOLTAGE SWITCH. PROVIDE LOW VOLTAGE SWITCH AS SHOWN.



**T24 DAYLIGHT AREAS**

- SOLID SHADING DEPICTS PRIMARY SIDELIT DAYLIGHT ZONE
- DIAGONAL HATCH SHADING DEPICTS SECONDARY SIDELIT DAYLIGHT ZONE
- CROSS HATCH SHADING DEPICTS PRIMARY SKY LIT DAYLIGHT ZONE
- SOLID SHADING DEPICTS PRIMARY SKY LIT DAYLIGHT ZONE

**NEW LIGHTING FLOOR PLAN**  
SCALE: 1/4" = 1'-0"  
NORTH

**GENERAL LIGHTING PLAN NOTES**

- LIGHTING FIXTURE LOCATIONS SHOWN ARE SCHEMATIC. REFER TO ARCHITECTURAL PLANS (REFLECTED CEILING, ELEVATIONS, ETC.) FOR EXACT LOCATIONS AND MOUNTING HEIGHTS PRIOR TO ROUGH-IN.
- COORDINATE MOUNTING HEIGHTS OF WALL AND PENDANT MOUNT LUMINAIRES WITH ARCHITECT PRIOR TO ROUGH-IN.
- REFER TO ARCHITECT'S REFLECTED CEILING PLAN(S) FOR CEILING HEIGHTS, TYPES, FINISHES, ETC. IN EACH AREA. VERIFY FLANGE TYPES, TRIM KITS, STEM LENGTHS, ETC. FOR ALL FIXTURES PRIOR TO SUBMITTALS.
- CONFIRM LOCATION OF ALL DOORS SWINGS WITH ARCHITECTURAL PLANS PRIOR TO ROUGH-IN OF SWITCHES.
- PROVIDE UNSWITCHED HOT LEG OF ROOM LIGHTING BRANCH CIRCUIT TO EACH BATTERY POWERED EMERGENCY LIGHT AND EXIT SIGN FOR CONTINUOUS CHARGING.
- HARD LID ACCESS PANELS TO BE PROVIDED BY EC, AS NEEDED. COORDINATE LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.

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**VENTURA COLLEGE ADMIN BLDG  
ALTERATION**  
4667 TELEGRAPH RD., VENTURA, CA, 93003  
**NEW LIGHTING FLOOR PLAN**

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| DRAWN BY        | CHECKED BY   |
| JM              |              |
| DATE            | 06/22/2025   |
| PROJECT NUMBER  | 3425-01-ED24 |
| SHEET           | E-211        |

### REFERENCE NOTES

1. EC SHALL RE-INSTALL EXISTING WALL MOUNTED IDF IN PREVIOUS LOCATION AS SHOWN ON PLAN. EC SHALL PROVIDE NEW CAT6A CABLING TO ALL NEW DATA RECEPTACLES IN PROJECT AREA EXISTING CATEGORY CABLING TO EXISTING DATA RECEPTACLES TO REMAIN.
2. EC SHALL INSTALL DISCONNECT SWITCH FOR NEW MECHANICAL UNIT. REFER TO MECHANICAL PLANS FOR FURTHER INFORMATION AND 11E-301 FOR MOUNTING.
3. EC SHALL INSTALL RECEPTACLE RELAYS ABOVE NEW CEILING. EC TO PROVIDE ACCESS PANEL ADJACENT TO RELAYS AT GYP. BOARD CEILINGS AS REQUIRED.
4. EC SHALL ADJUST INSTALLATION OF EXISTING J-BOX AND ASSOCIATED DATA RECEPTACLE TO ACCOMMODATE NEW WALL CONSTRUCTION. PROVIDE NEW CATEGORY CABLING AS REQUIRED. SPLICING OF CATEGORY CABLING IS NOT PERMITTED.
5. EC SHALL CONNECT NEW DEVICE TO EXISTING BRANCH CIRCUIT FROM DEMOLISHED RECEPTACLE. EXTEND BRANCH CIRCUIT CONDUCTORS AS REQUIRED. WHERE APPLICABLE, EC SHALL INTERCEPT EXISTING BRANCH CIRCUIT WIRING AND ROUTE THROUGH NEW RECEPTACLE RELAY TO PROVIDE CONTROLLED RECEPTACLE PER CEC 130.5(a). REFER TO E-112 FOR DEMOLITION ELECTRICAL FLOOR PLAN.
6. EC SHALL ADJUST INSTALLATION OF EXISTING J-BOX AND ASSOCIATED ELECTRICAL RECEPTACLE TO ACCOMMODATE NEW WALL CONSTRUCTION. EXTEND BRANCH CIRCUIT CONDUCTORS AS REQUIRED.
7. PROVIDE SURFACE MOUNTED, 120V GFI, WEATHERPROOF W.I.U., RECEPTACLE ON ROOF. REFER TO 10E-301.

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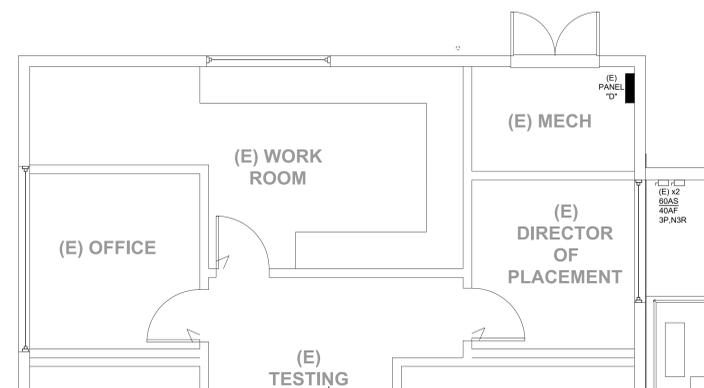


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### NEW ELECTRICAL FLOOR PLAN (NORTHEAST MECHANICAL ROOM)

SCALE: 1/4" = 10'  
NORTH



### GENERAL POWER PLAN NOTES

- A. U.O.N. INSTALL SEPARATE NEUTRALS FOR EACH BRANCH CIRCUIT.
- B. FUSING: ALL FUSIBLE SAFETY DISCONNECT SWITCHES SHALL BE PROVIDED WITH DUAL-ELEMENT TIME DELAY TYPE FUSES SIZED AND RATED PER EQUIPMENT MANUFACTURERS' RECOMMENDATIONS. VERIFY WITH EQUIPMENT NAMEPLATE BEFORE INSTALLATION.
- C. MOTOR OVERLOAD PROTECTION: WHERE REQUIRED BY NEC ARTICLE 430 PART C AND NOT SHOWN ON PLAN OR PROVIDED IN INTEGRAL WITH EQUIPMENT, PROVIDE AND INSTALL THERMAL OVERLOAD PROTECTION FOR ALL MOTORS.
- D. SPARE CONDUIT FOR RECESSED PANELS: PROVIDE (1) 3/4" SPARE CONDUIT STUB UP TO ACCESSIBLE ABOVE CEILING SPACE AND/OR ACCESSIBLE SPACE BELOW FOR EVERY (3) SPARE BREAKER SPACES AS INDICATED ON PANEL SCHEDULES.
- E. DEVICE LOCATIONS SHOWN ARE SCHEMATIC AND APPROXIMATE. EXACT LOCATIONS SHALL BE FIELD VERIFIED DURING ROUGH-IN WITH ARCHITECT, DISTRICT REPRESENTATIVE, ARCHITECTURAL ELEVATIONS, CASEWORK SHOP DRAWINGS, FURNITURE, ETC. AND SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICT WITH OTHER EQUIPMENT.
- F. ELECTRICAL AND COMMUNICATIONS OUTLETS SHOWN IN FIRE RATED, OR SOUND RATED (STC) ASSEMBLIES SHALL BE PROVIDED WITH PUTTY PADS LISTED FOR THE APPLICATION.
- G. ELECTRICAL AND COMMUNICATIONS OUTLETS SHOWN IN THE SAME LOCATION, SHALL BE MOUNTED ON OPPOSITE SIDES OF THE SAME STUD. COORDINATE BETWEEN ELECTRICAL AND COMMUNICATIONS PLANS. ALTERNATIVELY, A DEVICE BRACKET MAY BE USED BETWEEN STUDS WITH 4-INCH SEPARATION BETWEEN POWER AND LOW VOLTAGE BOXES.
- H. CONTROLLED RECEPTACLES: INSTALLED PER REQUIREMENTS OF 2022 BUILDING ENERGY EFFICIENCY STANDARDS / EFFICIENCY STANDARDS, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 6, SECTION 130.5 (D) - ELECTRICAL POWER DISTRIBUTION SYSTEMS AS CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND / OR CONTROLLED RECEPTACLES. SHALL BE PROVIDED WITH AN APPROVED MEANS OF INCLUDING A PERMANENT AND DURABLE MARKING IDENTIFYING THE CONTROLLED RECEPTACLES OR CIRCUITS TO DIFFERENTIATE THEM FROM UNCONTROLLED RECEPTACLES OR CIRCUITS. WHERE SHOWN ON ASSOCIATED FLOOR PLANS, AND OR REQUIRED BY THE STANDARDS: A DUPLEX NOTED TO BE CONTROLLED SHALL BE "SPLIT-WIRED" SO THE TOP OUTLET SHALL BE SWITCHED AND THE BOTTOM OUTLET SHALL BE UNSWITCHED. A DOUBLE DUPLEX (FOURPLEX) NOTED TO BE CONTROLLED SHALL HAVE ONE OF THE DUPLEX RECEPTACLES SHALL BE CONTROLLED AND THE OTHER DUPLEX RECEPTACLE SHALL BE UNSWITCHED.

### GENERAL COMM. PLAN NOTES

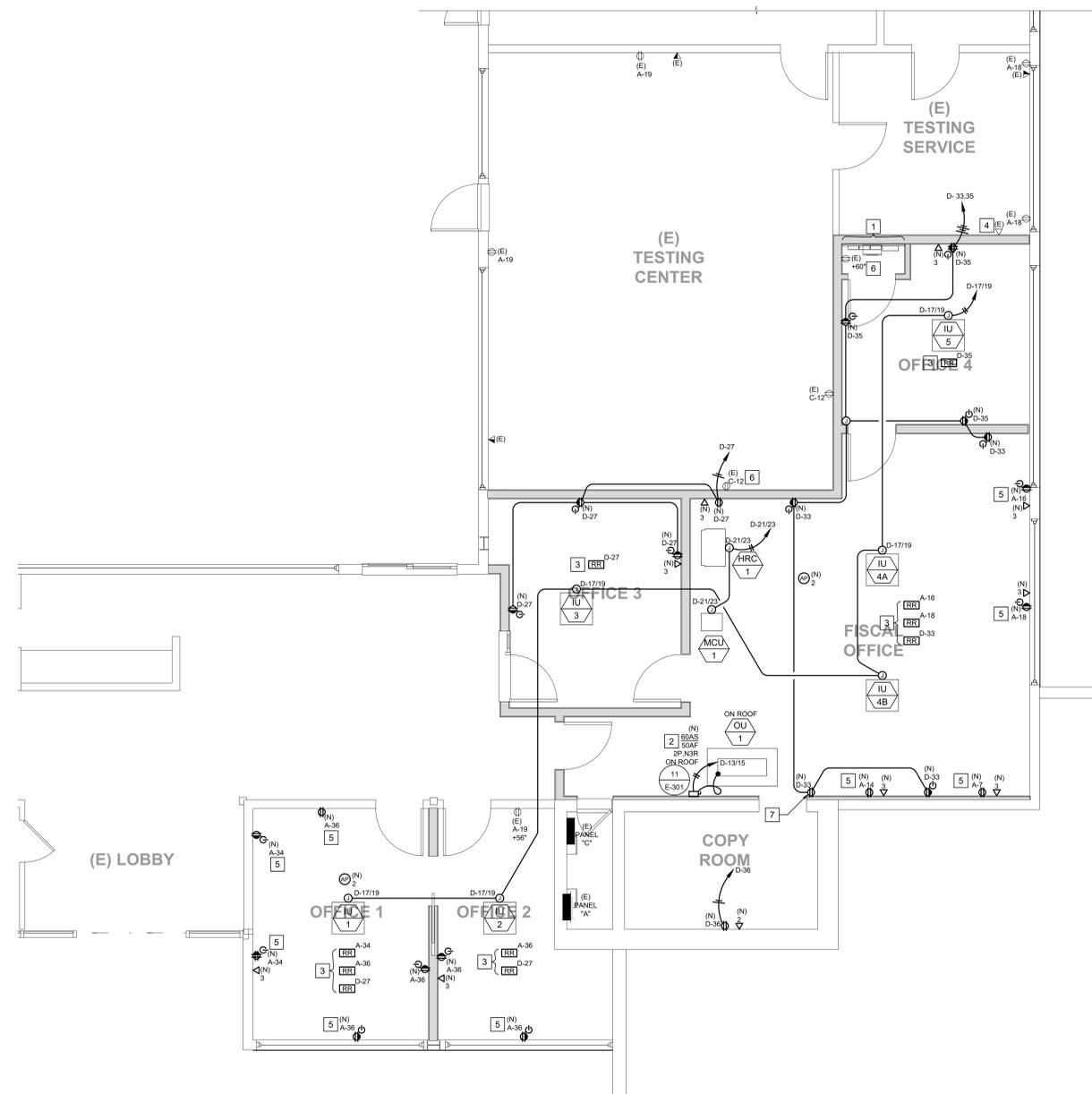
- A. SIGNAL AND COMMUNICATIONS SYSTEMS RACEWAYS AND BOXES: PROVIDE AND INSTALL 5" SQUARE RECESSED JUNCTION BOX WITH 1-GANG RING AND (1) 1-1/4" CONDUIT STUB TO ACCESSIBLE CEILING SPACE ABOVE OR UNDER FLOOR SPACE BELOW AS APPLICABLE AT EACH WALL TELECOMMUNICATIONS (VOICE, VOICE/DATA, DATA) OUTLET AND TELEVISION OUTLET LOCATION SHOWN ON THE PLANS UNLESS OTHERWISE NOTED. PROVIDE PATHWAYS BETWEEN COMMUNICATIONS EQUIPMENT ROOM LOCATIONS AND ACCESSIBLE CEILINGS FOR ROUTING OF DATA CABLES. WHERE NO ACCESSIBLE CEILING SPACE EXISTS, EC SHALL RUN (1) 1-1/4" CONDUIT FROM EACH OUTLET (FLOOR OR WALL) TO THE MDF / COMMUNICATIONS EQUIPMENT ROOM.  
  
PROVIDE 1-1/4" CONDUIT MINIMUM FOR FLOOR BOX TELECOM AND A.V. AS SHOWN ON TELECOM PLANS.  
  
BEFORE CONSTRUCTION, COORDINATE AND VERIFY ALL TELECOMMUNICATIONS OUTLET LOCATIONS WITH OWNER OR ARCHITECT.
- B. PROVIDE EQUIPMENT RACKS/ CABINET, PATCH PANELS, CABLING, TERMINAL BLOCKS & COMPLETE OUTLET ASSEMBLIES.
- C. TELEPHONE WIRING: EACH TELEPHONE OUTLET LOCATION SHOWN ON THE PLANS SHALL HAVE A 4 PAIR, 24 GAUGE CONTINUOUS CABLE (CATEGORY 6-CORDATA OR BERKTEK WITH GREY JACKET) HOMERUN TO THE TELEPHONE TERMINAL BOARD. TERMINATE AT OUTLET LOCATION WITH OWNER APPROVED JACK. VERIFY LOCATIONS WITH OWNER OR ARCHITECT PRIOR TO CONSTRUCTION.
- D. TELEVISION PREWIRE: EACH TELEVISION OUTLET SHOWN ON THE PLANS SHALL HAVE AN RG6 (WITH QUAD SHIELD) COAXIAL CABLE OR A 4 PAIR, 24 GAUGE CONTINUOUS CABLE (CATEGORY 6) HOMERUN PREWIRED TO THE CATV TERMINAL BOARD. LABEL AND LEAVE ADEQUATE SLACK FOR UTILITY CONNECTION. VERIFY CABLING WITH OWNER PRIOR TO PREWIRE.
- E. VOICE/DATA WIRING: EACH VOICE/DATA OUTLET LOCATION SHOWN ON THE PLANS SHALL HAVE (2) 4 PAIR, 24 GAUGE, CATEGORY 6, UTP CABLES (CORDATA OR BERKTEK WITH BLUE JACKET) HOMERUN TO THE MDF. TERMINATE AT OUTLET LOCATION WITH OWNER APPROVED JACK. VERIFY SYSTEM REQUIREMENTS WITH OWNER OR ARCHITECT PRIOR TO CONSTRUCTION.
- F. DEVICE LOCATIONS SHOWN ARE SCHEMATIC AND APPROXIMATE. EXACT LOCATIONS SHALL BE FIELD VERIFIED DURING ROUGH-IN WITH ARCHITECTURAL ELEVATIONS, CASEWORK SHOP DRAWINGS, FURNITURE, ETC. AND SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICT WITH OTHER EQUIPMENT.
- G. WHERE EQUIPMENT IS NOTED AS PROVIDED BY OWNER, EC SHALL COORDINATE AT CONTRACT NOTICE TO PROCEED, ACQUIRE ALL EQUIPMENT REQUIRED FROM OWNER STAFF. UNLESS OTHERWISE DIRECTED BY OWNER STAFF, ALL OWNER FURNISHED EQUIPMENT SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR.
- H. REFER TO COMMUNICATIONS RISER DIAGRAM, E-401, FOR FURTHER INFORMATION.

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NEW ELECTRICAL FLOOR PLAN



### NEW ELECTRICAL FLOOR PLAN (PROJECT AREA)

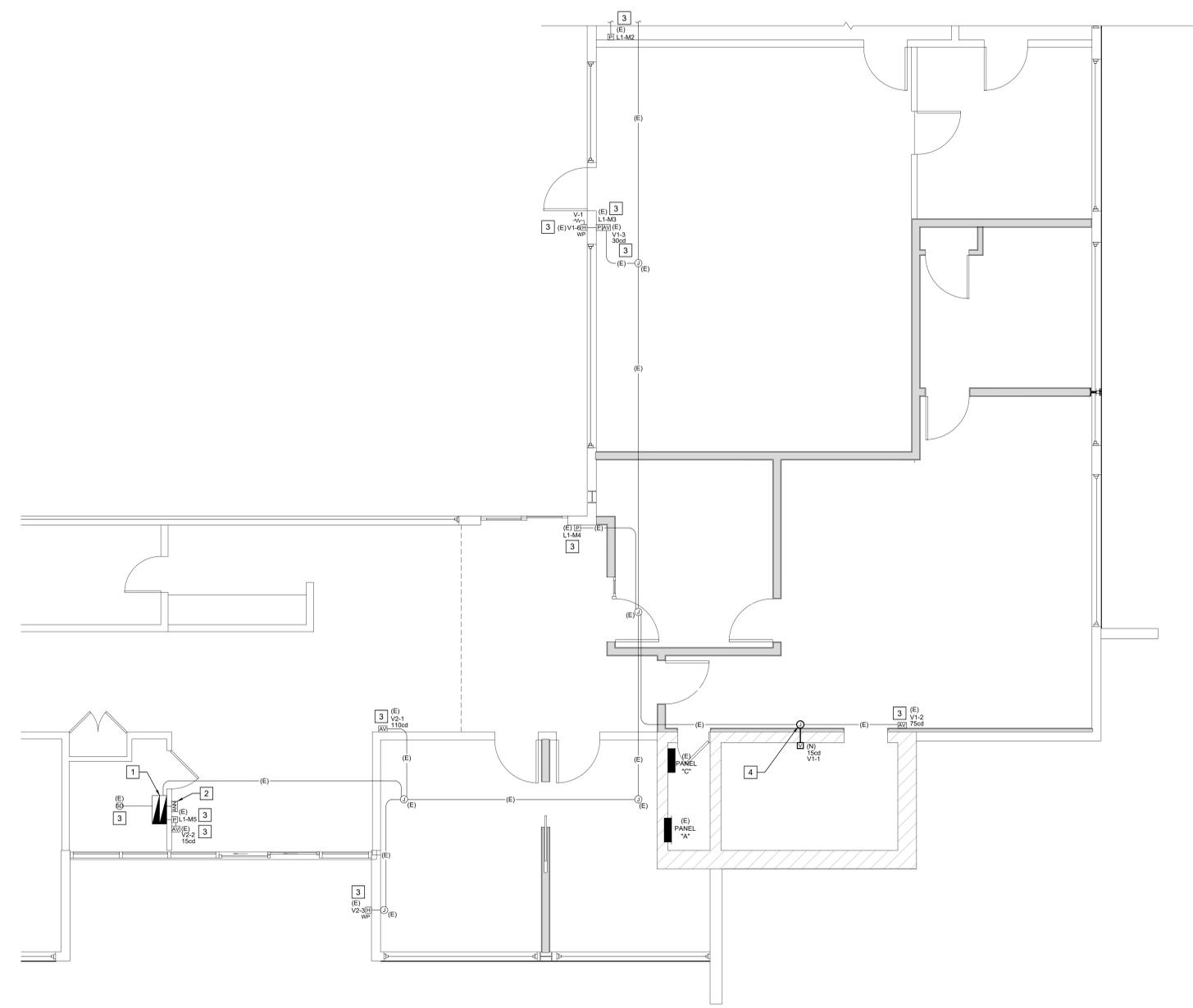
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| JM              |            |
| DATE            | 06/22/2025 |
| PROJECT NUMBER  |            |
| 3425-01-ED24    |            |
| SHEET           |            |
| E-212           |            |

REFERENCE NOTES

- EXISTING FIRE ALARM CONTROL PANEL, TO REMAIN.
- EXISTING FIRE ALARM ANNUNCIATOR PANEL, TO REMAIN.
- EXISTING FIRE ALARM DEVICES, TO REMAIN.
- INTERCEPT EXISTING FIRE ALARM CONDUIT. INTERCEPT AND EXTEND CONDUCTORS TO NEW FIRE ALARM STROBE. SEE FIRE ALARM RISER DIAGRAM SHEET E-214.



**NEW FIRE ALARM FLOOR PLAN**  
 SCALE: 1/4" = 10"  
 NORTH

DSA FILE #: 00-00  
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 4667 TELEGRAPH RD., VENTURA, CA, 93003  
**NEW FIRE ALARM FLOOR PLAN**

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| DATE            | 06/22/2025   |
| PROJECT NUMBER  | 3425-01-ED24 |
| SHEET           | E-213        |

**GL-2 FIRE ALARM NOTES CHECKLIST:**

- APPLICABLE STANDARD NFPA 72, AS ADOPTED AND AMENDED IN CBC CHAPTER 35
- INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM, HAS BEEN APPROVED BY DSA.
- UPON COMPLETION OF SYSTEM INSTALLATION, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR.
- A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
- ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF THE PROJECT.
- DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND/OR TESTING.
- ALL PENETRATIONS THROUGH RATED ASSEMBLIES REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER APPROVED LAB TESTING CRITERIA. APPROVED TYPES OF MATERIALS SHALL BE IDENTIFIED WITHIN THE PROJECT SPECIFICATIONS WITHIN THE FIRE ALARM SECTION.
- WALL MOUNTED VISIBLE NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM FROM FINISHED FLOOR.
- WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND NO CLOSER THAN 6" TO A HORIZONTAL STRUCTURE.
- AUDIBLE DEVICES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 DECIBELS (DBA) ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR FIVE DBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, IN EVERY OCCUPIABLE SPACE WITHIN THE BUILDING.
- AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN.
  - 2.16 APPLICABLE CODES: ENSURE THE CURRENT CODES ARE LISTED ON THE PLANS.
- THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
- VISIBLE DEVICES SHOULD NOT EXCEED TWO FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN ONE FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISIBLE DEVICES WITHIN 60' FROM EACH OTHER SHALL BE SYNCHRONIZED.
- UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.
- ALL FIRE ALARM WIRING SHALL BE FPL OR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE TYPE THHN OR THWN.
- PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE. ALL BOXES TO BE SIZED PER CEC.
- SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1' FROM FIRE SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED OVER TO THE OWNER.
- ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANNER AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS.
- FIRE ALARM PANEL, REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS.
- A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE "ON" POSITION. THE CIRCUIT BREAKER SHALL BE LABELED "FIRE ALARM CIRCUIT CONTROL." CIRCUIT ID TO BE LABELED AT FIRE PANEL/EXTENDERS.
- THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED "SYSTEM RECORD OF COMPLETION" PER NFPA 72, FIGURE 17.8.2.
- FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR.
- MICROPHONES ASSOCIATED WITH EMERGENCY VOICE ALARM COMMUNICATION SYSTEMS (EVAC) SHALL BE ACCESSIBLE FOR USE, INSTALLED IN COMPLIANCE WITH CBC SECTIONS 11B-305 AND 11B-308.
- THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2.
- SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
- OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.

**REFERENCE NOTES**

- EXISTING FIRE ALARM CONTROL PANEL AND ASSOCIATED ACCESSORIES, TO REMAIN.

| FIRE ALARM SYMBOLS LEGEND: |      |  |                                  |
|----------------------------|------|--|----------------------------------|
| DEVICES SYMBOL             | QTY. | MODEL #  | CSFM #                           |
|                            | 1    | (E) FIRE ALARM CONTROL PANEL GAMEWELL/FCI: S3                            | 7165-1703-0176                   |
|                            | 1    | (E) DIGITAL COMMUNICATOR GAMEWELL/FCI: E3                                |                                  |
|                            | 2    | (E) REMOTE ANNUNCIATOR GAMEWELL/FCI: LCD-SLP                             | 7165-1703-0176                   |
|                            | 1    | (E) DOCUMENT BOX   |                                  |
|                            | 1    | (E) ADDRESSABLE SMOKE DETECTOR GAMEWELL/FCI: ASD-PL2F WITH B210LFP BASE  | 7272-1703-0121<br>7300-1703-0103 |
|                            | 6    | (E) PULL STATION GAMEWELL/FCI: MS-7AF                                    | 7150-1703-0103                   |
|                            | 5    | (E) WALL MOUNT MULTI-CANDELA HORN/STROBE SYSTEM SENSOR P2W               | 7125-1653-0188                   |
|                            | 10   | (E) WALL MOUNT STROBE SYSTEM SENSOR: SW                                  | 7125-1653-0186                   |
|                            | 1    | (N) WALL MOUNT STROBE SYSTEM SENSOR: SWL                                 | 7125-1653-0504                   |
|                            | 3    | (E) WEATHERPROOF HORN SYSTEM SENSOR: HFK                                 | 7125-1653-0188                   |
|                            |      | (E) END OF LINE RESISTOR (EOLR) *SIZE PER MANUFACTURERS RECOMMENDATIONS. | --                               |

**GENERAL NOTES**

- ALL FIRE ALARM WIRING SHALL BE INSTALLED IN A MINIMUM 1" CONDUIT.
- A120 VAC WIRING WILL BE MINIMUM #12 AWG
- WIRING SHALL NOT BE LOOPEL THROUGH DEVICE TERMINALS. CONDUCTORS MUST BE CUT AND WIRED "IN" AND "OUT" SO THAT ADEQUATE SUPERVISION OF THE CIRCUIT CAN BE MAINTAINED.
- ALL DEVICES POLARITY MUST BE OBSERVED.
- FIRE ALARM CONDUIT AND WIRING INSTALLATION SHALL COMPLY WITH CALIFORNIA ELECTRICAL CODE #760.
- THIS IS A COMPLETE FIRE ALARM SUBMITTAL: If an alternate system is proposed, Contractor shall submit a separate set of engineered plans, specifications, and engineering calcs, for prior approval to the Owner, Division of State Architect (DSA), Architect, and Engineer including but not necessarily limited to:
  - All CSFM listing numbers and Manufacturers model numbers for all system components proposed for this system.
  - Complete Riser Diagram with point to point wiring diagrams including battery and voltage drop calculations for the entire system.
  - Indication of conductor type(s), power-limited or non-power limited system.
  - Information as required to demonstrate compliance with all applicable codes(s) and to obtain approval of all Authorities having Jurisdiction (AHJ). In the event of a substitution, installation shall not begin until separate approval has been obtained and all of the above has been accepted and signed by the (AHJ) and the Architect, see Specification Section 01631 regarding substitutions. If routing differs significantly from these plans, approval of the Engineer must be obtained before installation. After construction, provide an accurate set of field record drawings to Owner.
- FIRE ALARM SYSTEM SHALL BE SURVIVABILITY LEVEL-0.
- CONTRACTOR SHALL REVIEW ARCHITECTURAL, MECHANICAL, PLUMBING, CIVIL, THEATRICAL LIGHTING, FIRE PROTECTION, FOOD SERVICE AND ALL OTHER PROJECT DRAWINGS AND SPECIFICATIONS, CONFIRM ALL REQUIRED FIRE ALARM CONNECTION AND INCLUDE WITH BID.

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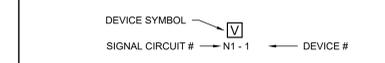
**CABLING SCHEDULE**

- (N)2#12 THIN-STND OR CABLING AS PER MANUFACTURERS RECOMMENDATIONS.
  - EXISTING CONDUCTORS, TO REMAIN.
- \*\* CONDUIT SIZE SHOWN IS MINIMUM, UNLESS OTHERWISE NOTED ON PLANS. REFER TO FLOOR PLAN FOR ADDITIONAL FIRE ALARM CONDUIT SIZE REQUIREMENTS. EC SHALL SUBMIT CABLE MAKE/MODEL/CSFM LISTING (OR APPROVED EQUAL) WITH FIRE ALARM PROJECT DATA.

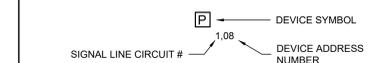
**SYSTEM DESCRIPTION**

SYSTEM TYPE: MANUAL  
INDICATING CIRCUIT CLASS: "I"  
THE FIRE ALARM SYSTEM SHALL BE OF A TYPE THAT UPON ACTIVATION INITIATES BUILDING FIRE ALARM NOTIFICATION.

**SIGNAL DEVICE CIRCUITING LEGEND**



**INITIATING DEVICE CIRCUITING LEGEND**

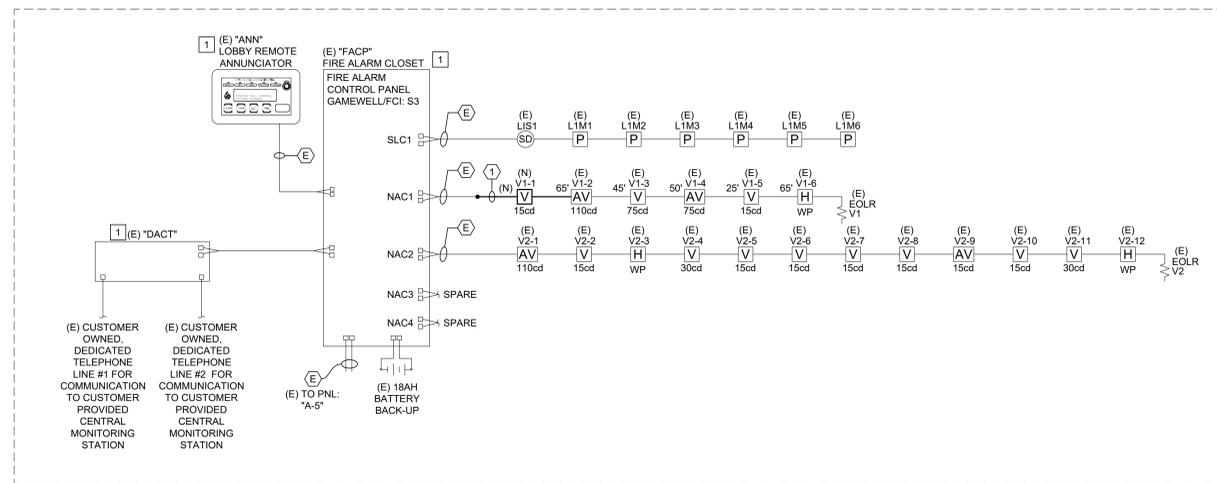


**FIRE ALARM SYSTEM NOTES**

- FIRE ALARM SYSTEM SHALL BE SUPERVISED BY AN APPROVED, UL LISTED CENTRAL STATION (UJXF) OR REMOTE STATION (UJUS) MONITORING COMPANY. (REF: CFC, 907.2.3.5)
- DOCUMENTATION CABINET TO BE INSTALLED PROXIMAL TO THE FACU. (NFPA 72, 7.7.2.1)
- ALL RECORD DOCUMENTATION SHALL BE STORED IN THE DOCUMENTATION CABINET. (NFPA 72, 7.7.2.2)
- THE DOCUMENTATION CABINET TO BE PROMINENTLY LABELED "SYSTEM RECORD DOCUMENTS". (NFPA 72, 7.7.2.4)

**APPLICABLE CODES**

- 2022 CALIFORNIA ADMINISTRATIVE CODE - PART 1, TITLE 24, CCR
- 2022 CALIFORNIA BUILDING CODE - PART 2, TITLE 24, CCR
- 2021 INTERNATIONAL BUILDING CODE AND 2022 CALIFORNIA AMENDMENTS)
- 2022 CALIFORNIA ELECTRICAL CODE - PART 3, TITLE 24, CCR
- (2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
- 2022 CALIFORNIA FIRE CODE - PART 5, TITLE 24, CCR
- (2022 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)
- NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE, 2022 EDITION



| FACP BATTERY CALCULATIONS   |               |          |     |                      |                  |                  |
|---|---------------|----------|-----|----------------------|------------------|------------------|
| PROJECT: Ventura College Admin. Alteration - (E)FACP                  |               |          |     |                      |                  |                  |
| Based on 24 Hour Standby  |               |          |     |                      |                  |                  |
| Device  | Manufacturer  | #        | QTY | Standby Amps         | Total Alarm Amps | Total Alarm Amps |
| (E) FA Control Panel "SLP-E3"   | Gamewell/FCI  | SLP-E3   | 1   | 0.10000              | 0.10000          | 0.18000          |
| (E)-Digital Communicator  | Gamewell/FCI  | DACT-E3  | 1   | 0.01800              | 0.01800          | 0.01800          |
| (E)-Interface Module  | Gamewell/FCI  | RPT-E3   | 1   | 0.01300              | 0.01300          | 0.01300          |
| (E)-Annunciator   | Gamewell/FCI  | LCD-E3   | 2   | 0.03000              | 0.06000          | 0.13000          |
| (E)-Remote LED Driver Module  | Gamewell/FCI  | 24V RP   | 1   | 0.05000              | 0.05000          | 0.05000          |
| (E) Addressable Photo Sensor  | Gamewell/FCI  | ASD-PL2F | 1   | 0.00030              | 0.00030          | 0.00650          |
| (E) Pull Station  | Gamewell/FCI  | MS-7AF   | 6   | 0.000375             | 0.00225          | 0.00360          |
| (E) Notification Circuit  |               |          | 1   | 0.00000              | 0.00000          | 1.55600          |
| (N)Wall Mount Strobe  | System Sensor | SWL      | 1   | 0.08800              | 0.08800          | 0.08800          |
| Total Standby Amps =  |               |          |     | 0.332 x 24 Hours =   | 7.957            | Amp-Hours        |
| Total Alarm Amps =  |               |          |     | 2.045 x 0.25 Hours = | 0.511            | Amp-Hours        |
| Total Amp-Hours required after 24 hours standby and 15 minutes alarm: |               |          |     |                      | 8.468            | Amp-Hours        |
| Total Battery Amp-Hours required:                                     |               |          |     |                      | 10.59            | Amp-Hours        |
| Total Amp-Hours required x 1.25 =                                     |               |          |     |                      | 13.24            | Amp-Hours        |
| Total Amp-Hours Supplied:   |               |          |     |                      | 7.414            | Amp-Hours        |
| Spare Capacity =  |               |          |     |                      |                  |                  |

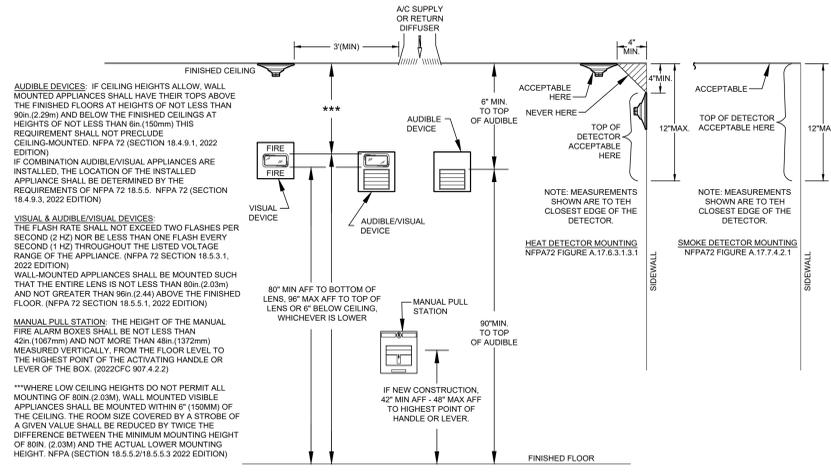
| VOLTAGE DROP (VD) CALCULATION                 |       |       |       |       |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| PROJ. NAME: Ventura College Admin. Alteration |       |       |       |       |       |       |       |       |       |       |
| SIG CKT #: V1                                 |       |       |       |       |       |       |       |       |       |       |
| DEVICE #                                      | 1st   | 2nd   | 3rd   | 4th   | 5th   | 6th   | 7th   | 8th   | 9th   | 10th  |
| CABLE WIRE                                    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    |
| DISTANCE (FT)                                 | 60    | 10    | 45    | 50    | 25    | 65    | 0     | 0     | 12    | 12    |
| AMPS @ DEVICE                                 | 0.088 | 0.198 | 0.158 | 0.154 | 0.066 | 0.044 | 0     | 0     | 0     | 0     |
| AMPS DEVELOPED                                | 0.708 | 0.62  | 0.422 | 0.264 | 0.11  | 0.044 | 0     | 0     | 0     | 0     |
| VOLT DROP                                     | 0.135 | 0.020 | 0.080 | 0.042 | 0.009 | 0.009 | 0.000 | 0.000 | 0.000 | 0.000 |

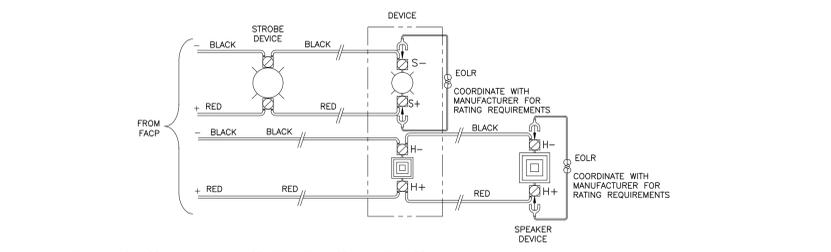
| WIRE SIZE | RESIS. /M FT. | CIRC MILS. |
|-----------|---------------|------------|
| 6         | 0.5           | 26240      |
| 10        | 1.21          | 10390      |
| 12        | 1.59          | 6530       |
| 14        | 2.52          | 4110       |
| 16        | 4.02          | 2580       |
| 18        | 6.39          | 1620       |
| 20        | 10.1          | 1020       |
| 22        | 16.2          | 640        |
| 24        | 25.7          | 404        |

| FORMULA                   | WIRE SIZE | RESIS. /M FT. | CIRC MILS. |
|---------------------------|-----------|---------------|------------|
| SIGNAL CIRCUIT =          | 10        | 1.21          | 10390      |
| TOTAL CKT V.D. =          | 0.275     |               |            |
| TOTAL CKT AMPS =          | 0.708     |               |            |
| CKT VOLTAGE =             | 20.4      |               |            |
| VOLTAGE AT FINAL DEVICE = | 20.125    |               |            |
| % VOLTAGE DROP =          | 1.348     |               |            |



**1 DEVICE ELEVATION DETAIL**  
SCALE: N.T.S.



**2 TYPICAL NOTIFICATION CIRCUIT WIRING DIAGRAM**  
SCALE: N.T.S.

**EXISTING SEQUENCE OF OPERATIONS**

| ACTIVATE AUDIBLE AND VISUAL ALARM NAC/DO DEVICES THROUGHOUT | ANNUNCIATE AT 24 HOUR CENTRAL MONITORING STATION (supervisory) | ANNUNCIATE AT 24 HOUR CENTRAL MONITORING STATION (trouble) | ANNUNCIATE AT 24 HOUR CENTRAL MONITORING STATION (alarm) | ANNUNCIATE AT FIRE ALARM REMOTE ANNUNCIATOR (supervisory) | ANNUNCIATE AT FIRE ALARM REMOTE ANNUNCIATOR (trouble) | ANNUNCIATE AT FIRE ALARM REMOTE ANNUNCIATOR (alarm) | ANNUNCIATE AT FIRE CONTROL PANEL (supervisory) | ANNUNCIATE AT FIRE CONTROL PANEL (trouble) | ANNUNCIATE AT FIRE CONTROL PANEL (alarm) | FUNCTION              |
|---|--|--|--|---|---|---|--|--|--|-----------------------|
| YES   | NO   | YES  | YES  | NO  | YES   | YES   | NO   | YES  | YES                                      | MANUAL PULL STATIONS  |
| YES   | NO   | YES  | YES  | NO  | YES   | YES   | NO   | YES  | YES                                      | AREA SMOKE            |
| NO  | NO   | YES  | NO   | NO  | NO  | NO  | YES  | NO   | NO                                       | 120 VAC POWER FAILURE |
| NO  | YES  | NO   | NO   | YES   | NO  | NO  | YES  | NO   | NO                                       | DISABLE NAC CIRCUIT   |

VENTURA COLLEGE ADMIN BLDG ALTERATION  
4667 TELEGRAPH RD., VENTURA, CA 93003  
FIRE ALARM RISER DIAGRAM

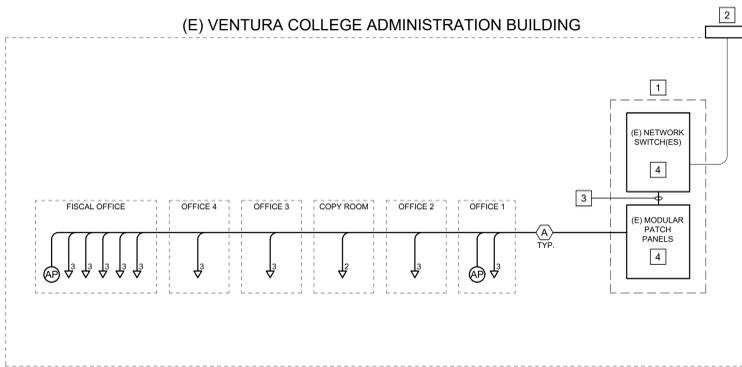
| NO. | REVISION | DATE |
|-----|----------|------|
|     |          |      |
|     |          |      |
|     |          |      |
|     |          |      |

|                 |              |            |            |
|-----------------|--------------|------------|------------|
| PROJECT MANAGER | JM           | CHECKED BY | JM         |
| DRAWN BY        | JM           | DATE       | 06/22/2025 |
| PROJECT NUMBER  | 3425-01-ED24 |            |            |
| SHEET           | E-214        |            |            |



(E) VENTURA COLLEGE ADMINISTRATION BUILDING



REFERENCE NOTES

- EXISTING WALL MOUNTED IDF, TO REMAIN.
- EXISTING INCOMING COMMUNICATIONS SERVICE AT TERMINAL CABINET AT BUILDING EXTERIOR.
- PROVIDE CAT 6A JUMPERS - TO MATCH CABLE PLANT (2M MAX).
- CONTRACTOR SHALL COORDINATE WITH OWNER IT STAFF FOR INSTALLATION AND SCHEDULING OF NEW EQUIPMENT TO BE PROVIDED BY THE IT DEPT, AS APPLICABLE.

COMMUNICATIONS LEGEND

- AP** = INTERIOR WIRELESS ACCESS POINT (PROVIDED BY OWNER, INSTALLED BY EC). PROVIDE (N) (2) CAT6A CABLES EACH TERMINATED IN 2-PORT BISCUIT IN ACCESSIBLE CEILING. ALL CAT6A MODULAR JACKS, CABLE, AND PATCH CABLES SHALL BE BLUE.
- ∇<sup>1</sup>** = DATA OUTLET AT LOCATION SHOWN IN PLAN. '1' = NUMBER OF CAT6 DATA DROPS. ALL CAT6A MODULAR JACKS, CABLE, AND PATCH CABLES SHALL BE BLUE.

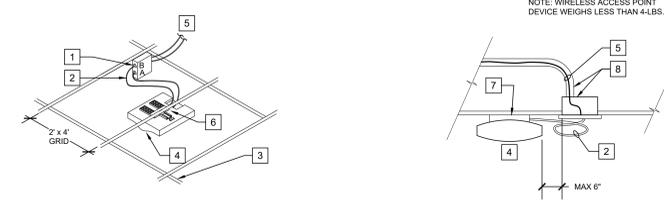
CABLING SCHEDULE

| SYMBOL | DESCRIPTION   |
|--------|---|
| (A)    | LEVITON 'SST' INDOOR, PLENUM RATED CAT6A CABLING, BLUE IN COLOR |

GENERAL NOTES

- CATEGORY CABLING, MODULAR JACKS, AND PATCH CABLES SHALL MATCH COLOR OF (N) CABLE PLANT AS FOLLOWS:  
+ CAT6A = BLUE IN COLOR.
- CAT6A CABLES, TOTAL LENGTH FROM IDF TO ENDPOINT SHALL NOT BE MORE THAN 295'-0". CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ENGINEER ANY LENGTHS IN EXCESS OF 295'-0".
- OWNER TO PROVIDE VOIP (VOICE OVER INTERNET PROTOCOL) PHONE HAND SETS AT EACH NEW LOCATION.
- CABLING TYPES SHALL BE SUITABLE AND RATED FOR THE APPLICATION INSTALLED (PLENUM, UNDERGROUND, ETC.).
- ALL FIBER OPTIC CABLES SHALL BE FUSION SPLICED TO PRE-TERMINATED/POLISHED PIG-TAILS IN APPROVED FIBER SPLICING ENCLOSURES AND SPLICING TRAYS.
- RISER DIAGRAM SHOWS NEW WORK ONLY.

1 COMMUNICATIONS RISER DIAGRAM  
NTS



REFERENCE NOTES

- 2-PORT BISCUIT SECURELY MOUNTED IN TO LEVITON QUICKPORT CEILING BRACKET (4923-CBC OR APPROVED EQUAL) IN ACCESSIBLE CEILING SPACE. EC SHALL PROVIDE LABELS FOR EACH CABLE AT BISCUIT, AND SHALL TERMINATE (FEMALE) AND TEST BOTH CABLES, AND PROVIDE TEST RESULTS TO OWNER.
- (2) BLUE CAT6A PATCH CABLES BETWEEN NEW WIRELESS ACCESS POINT AND CAT6A TERMINATION BISCUIT. ETHERNET 'T' PATCH CABLE SHALL BE INSERTED INTO LOWEST 'T' PORT ON WIRELESS ACCESS POINT, AND 'M' CABLE ON BISCUIT. ETHERNET 'T' SHALL BE PLUGGED INTO FOLLOWING PORTS ON EITHER END. MAX LENGTH 0.5-METER WHEN EXPOSED, MAX LENGTH 2-METER WHEN ABOVE ACCESSIBLE CEILING.
- T-BAR CEILING PENETRATIONS THROUGH CEILING TILES SHALL BE SEALED SO AS TO MAINTAIN FIRE RATING OF CEILING TILE IF APPLICABLE.
- WIRELESS ACCESS POINT, TO BE PROVIDED BY OWNER AND INSTALLED BY ELECTRICAL CONTRACTOR. EC SHALL NOTIFY OWNER OF ACCESS POINT QUANTITIES AND LOCATIONS A MINIMUM OF 6-WEEKS PRIOR TO INSTALLATION DATE. PROVIDE LABEL ON WAP WITH FACILITY STANDARD LABELING.
- (2) BLUE CAT6A CABLES FROM IDF TO TERMINATION. ALL CAT6A CABLE AND TERMINATION HARDWARE (INCLUDING MODULAR JACKS, PATCH CABLES, ETC.) SHALL BE BLUE IN COLOR.
- WAP MANUFACTURER PROVIDED T-BAR MOUNTING CLIP. ADHERE STRICTLY TO MANUFACTURER PROVIDED INSTALLATION INSTRUCTIONS.
- WAP MANUFACTURER PROVIDED SURFACE-MOUNT HARDWARE. ADHERE STRICTLY TO MANUFACTURER PROVIDED INSTALLATION INSTRUCTIONS.
- 5-SQUARE, FLUSH-MOUNTED BACK-BOX WITH HUD-RING, CONDUIT, AND 2-PORT FACEPLATE PER T-901 ROUGH-IN REQUIREMENTS.

2 INDOOR WIRELESS ACCESS POINT  
SCALE: NTS

DSA FILE #: 00-00  
PROJECT TRACKING #: 00000-00



rrmdesign.com | (805) 543-1794

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CONSULTING ENGINEER



THOMA ELECTRIC, INC.  
P.O. Box 1167 - 3562 Empleo St.  
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Phone: (805) 543-3850  
Fax: (805) 543-3829  
ca@thomaelec.com  
THOMA #25-8028

VENTURA COLLEGE ADMIN BLDG  
ALTERATION  
4667 TELEGRAPH RD., VENTURA, CA, 93003  
COMMUNICATIONS RISER  
DIAGRAM

| NO. | REVISION | DATE |
|-----|----------|------|
| △   |          |      |
| △   |          |      |
| △   |          |      |
| △   |          |      |
| △   |          |      |

PROJECT MANAGER  
JM

DRAWN BY: JM      CHECKED BY: JM

DATE: 06/22/2025

PROJECT NUMBER: 3425-01-ED24

SHEET: E-401

STATE OF CALIFORNIA  
**Indoor Lighting**  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 7 of 8)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

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STATE OF CALIFORNIA  
**Indoor Lighting**  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 8 of 8)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

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**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**  
 I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Jeffrey M. Thoma  
 Signature Date: 2025-06-21  
 Company: Thoma Electric, Inc.  
 Address: 3562 Empleo Street  
 City/State/Zip: San Luis Obispo CA 93401  
 Phone: 805-543-3850

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**  
 I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Jeffrey M. Thoma  
 Signature Date: 2025-06-21  
 Company: Thoma Electric, Inc.  
 Address: 3562 Empleo Street  
 City/State/Zip: San Luis Obispo CA 93401  
 Phone: 805-543-3850

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

STATE OF CALIFORNIA  
**Indoor Lighting**  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 9 of 8)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

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**V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**  
 Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/attcp/providers.html>

Form/Title: NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.

Systems/Spaces To Be Field Verified: Lobby, Main Entry, Copy Room, Office Area (<250sf), Office Area (>250sf)

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

STATE OF CALIFORNIA  
**Electrical Power Distribution**  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 1 of 4)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

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**A. GENERAL INFORMATION**

|                                    |         |                              |   |
|------------------------------------|---------|------------------------------|---|
| 01 Project Location (city)         | Ventura | 02 Climate Zone              | 6 |
| 03 Occupancy Types Within Project: |         | All Other Occupancies/Office |   |

**B. PROJECT SCOPE**  
 This table includes electrical systems that are within the scope of the permit application.

| 01   | 02  | 03                        | 04  | 05  | 06   | 07   |
|--|---|---------------------------|---|---|--|--|
| Electrical Service Designation/Description | Scope of Work <sup>2</sup>                  | Rating <sup>3</sup> (kVA) | Utility Provided Metering System Exception to 130.5(a) <sup>1</sup> 160.6(a) <sup>1</sup> | System subject to CA Elec Code Article 517 Exception to 130.5(a) and 160.6(a) | Demand Response Controls   | Provides power to dwelling units/common living areas only in multifamily occupancy |
| MSB  | Add/Air to feeders and branch circuits only | 216                       |   |   | Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections 120.2/160.3, 130.1/160.5, and 130.3/160.5, and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required. |  |

**FOOTNOTES:** Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.  
<sup>1</sup> If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.  
<sup>2</sup> Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.

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STATE OF CALIFORNIA  
**Indoor Lighting**  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 5 of 2)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

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**I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS**

| Copy Room            | Copy Room                  | 03   | 129   | 64.5  | No                            | No |
|----------------------|----------------------------|------|-------|-------|-------------------------------|----|
| Office Area (<250sf) | Office (<=250 square feet) | 0.65 | 656   | 426.4 | No                            | No |
| Office (>250sf)      | Office (>250 square feet)  | 0.6  | 545   | 327   | No                            | No |
| <b>TOTALS:</b>       |                            |      | 1,505 | 940.4 | See Tables J, or P for detail |    |

**J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM**  
 This section does not apply to this project.

**K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE**  
 This section does not apply to this project.

**L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY**  
 This section does not apply to this project.

**M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING**  
 This section does not apply to this project.

**N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS**  
 This section does not apply to this project.

**O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE**  
 This section does not apply to this project.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

STATE OF CALIFORNIA  
**Indoor Lighting**  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 6 of 8)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

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**P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))**  
 This section does not apply to this project.

**Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS**  
 This section does not apply to this project.

**R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS**  
 This section does not apply to this project.

**S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)**  
 This section does not apply to this project.

**T. DWELLING UNIT LIGHTING**  
 This section does not apply to this project.

**U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**  
 Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title: NRCA-LTI-E - Must be submitted for all buildings

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

STATE OF CALIFORNIA  
**Indoor Lighting**  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 1 of 8)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

Generated Date/Time: Documentation Software: EnergyPro

**A. GENERAL INFORMATION**

|  |         |  |       |
|--|---------|--|-------|
| 01 Project Location (city)                                 | Ventura | 04 Total Conditioned Floor Area (ft <sup>2</sup> )   | 1,505 |
| 02 Climate Zone  | 6       | 05 Total Unconditioned Floor Area (ft <sup>2</sup> ) | 0     |
| 03 Occupancy Types Within Project (select all that apply): |         | 06 # of Stories (Habitable Above Grade)              | 1     |

Office All Other Occupancies

**B. PROJECT SCOPE**  
 This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

| Scope of Work  | Conditioned Spaces   | Unconditioned Spaces    |                      |                         |
|--|----------------------|-------------------------|----------------------|-------------------------|
| 01   | 02                   | 03                      | 04                   | 05                      |
| My Project Consists of (check all that apply):                     | Calculation Method   | Area (ft <sup>2</sup> ) | Calculation Method   | Area (ft <sup>2</sup> ) |
| <input type="checkbox"/> New Lighting System                       |                      |                         |                      |                         |
| <input type="checkbox"/> Existing Lighting System - Parking Garage |                      |                         |                      |                         |
| <input checked="" type="checkbox"/> Altered Lighting System        | Area Category Method | 1505                    | Area Category Method | 0                       |
| <b>Total Area of Work (ft<sup>2</sup>)</b>                         |                      | 1505                    | 0                    |                         |

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

STATE OF CALIFORNIA  
**Indoor Lighting**  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 2 of 8)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

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**C. COMPLIANCE RESULTS**  
 If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D, for guidance.

| Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)2 / 170.2(e) | Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts) |                                     |   |                                     |                       | Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts) |   |   | Compliance Results               |
|---|--|-------------------------------------|---|-------------------------------------|-----------------------|---|---|---|----------------------------------|
|   | 01   | 02                                  | 03  | 04                                  | 05                    | 06  | 07  | 08  |                                  |
|   | Complete Building 140.6(c)1                            | Area Category 140.6(c)2 / 170.2(e)4 | Area Category Additional 140.6(c)2G / 170.2(e)4Av (+) | Tailored 140.6(c)3 / 170.2(e)4B (+) | Total Allowed (Watts) | Total Designed (Watts)                                  | PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-) | Total Adjusted (Watts) + Included Adjustments |                                  |
| (See Table I)   | (See Table J)  | (See Table K)                       | (See Table L)   | 940                                 | ≥                     | 879   | 0   | 879   | 05 must be ≥ 08 140.6 / 170.2(e) |
| Conditioned   | 940.4  | 0                                   | 0   | 940                                 | ≥                     | 879   | 0   | 879   | COMPLIES                         |
| Unconditioned   |  |                                     |   |                                     | ≥                     |   |   |   | COMPLIES                         |
| Controls Compliance (See Table H for Details)   |  |                                     |   |                                     |                       |   |   |   |                                  |
| Rated Power Reduction Compliance (See Table Q for Details)  |  |                                     |   |                                     |                       |   |   |   |                                  |

**D. EXCEPTIONAL CONDITIONS**  
 This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

**E. ADDITIONAL REMARKS**  
 This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

STATE OF CALIFORNIA  
**Indoor Lighting**  
 CERTIFICATE OF COMPLIANCE  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 3 of 8)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-6405-0625-1576 Report Generated: 2025-06-21 12:08:11

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**F. INDOOR LIGHTING FIXTURE SCHEDULE**  
 This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Conditioned Spaces

| 01  | 02                             | 03                      | 04   | 05                               | 06                        | 07                         | 08                                  | 09           | 10              |
|---|--------------------------------|-------------------------|--|----------------------------------|---------------------------|----------------------------|-------------------------------------|--------------|-----------------|
| Name or Item Tag                                | Complete Luminaire Description | Modular (Track) Fixture | Small Aperture & Color Change <sup>1</sup> | Watts per luminaire <sup>2</sup> | How is Wattage determined | Total Number of Luminaires | Excluded per 140.6(a)3 / 170.2(e)2C | Design Watts | Field Inspector |
| A1  | A1 - LED - 31W                 | No                      | NA   | 31                               | Mfr. Spec                 | 2                          | No                                  | 62           | Pass Fail       |
| A2  | A2 - LED - 27W                 | No                      | NA   | 27                               | Mfr. Spec                 | 16                         | No                                  | 432          | Pass Fail       |
| A2D   | A2D - LED - 27W                | No                      | NA   | 27                               | Mfr. Spec                 | 11                         | No                                  | 297          | Pass Fail       |
| B1  | B1 - LED - 35W                 | No                      | NA   | 35                               | Mfr. Spec                 | 2                          | No                                  | 70           | Pass Fail       |
| D1  | D1 - LED - 18W                 | No                      | NA   | 18                               | Mfr. Spec                 | 1                          | No                                  | 18           | Pass Fail       |
| <b>Total Designed Watts: CONDITIONED SPACES</b> |                                |                         |  |                                  |                           |                            |                                     | 879          |                 |

**FOOTNOTE:** Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75%/80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.  
<sup>2</sup> Authority Having Jurisdiction may ask for luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.

**G. MODULAR LIGHTING SYSTEMS**  
 This section does not apply to this project.

**H. INDOOR LIGHTING CONTROLS (Not including PAFs)**  
 This table includes lighting controls for conditioned and unconditioned spaces.

| Building Level Controls | 01                                  | 02                                      | 03                        |
|-------------------------|-------------------------------------|---|---------------------------|
|                         | Mandatory Demand Response 110.12(c) | Shut-off controls 130.1(c) / 160.5(b)4C | Field Inspector Pass Fail |

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**Thoma ENGINEERING**  
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 east@thomaelectric.com  
 THOMA #25-8028

VENTURA COLLEGE ADMIN BLDG ALTERATION  
 4667 TELEGRAPH RD., VENTURA, CA, 93003  
 INTERIOR TITLE 24 COMPLIANCE DOCUMENTATION

| NO. | REVISION | DATE |
|-----|----------|------|
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|     |          |      |

PROJECT MANAGER: J.M.  
 DRAWN BY: J.M. CHECKED BY: J.M.  
 DATE: 06/22/2025  
 PROJECT NUMBER: 3425-01-ED24  
 SHEET: E-501

STATE OF CALIFORNIA  
**Electrical Power Distribution**  
 CALIFORNIA ENERGY COMMISSION

**CERTIFICATE OF COMPLIANCE** NRCC-ELC-E  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 4 of 4)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**  
 I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Jeffrey M. Thoma  
 Signature Date: 2025-06-21  
 Company: Thoma Electric, Inc.  
 Address: 3562 Empelo Street  
 City/State/Zip: San Luis Obispo CA 93401  
 Phone: 805-543-3850

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**  
 I certify the following under penalty of perjury, under the laws of the State of California:  
 1. The information provided on this Certificate of Compliance is true and correct.  
 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).  
 3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 4, and Part 6 of the California Code of Regulations.  
 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.  
 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Jeffrey M. Thoma  
 Signature Date: 2025-06-21  
 Company: Thoma Electric, Inc.  
 Address: 3562 Empelo Street  
 City/State/Zip: San Luis Obispo CA 93401  
 Phone: 805-543-3850

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STATE OF CALIFORNIA  
**Electrical Power Distribution**  
 CALIFORNIA ENERGY COMMISSION

**CERTIFICATE OF COMPLIANCE** NRCC-ELC-E  
 This document is used to demonstrate compliance with mandatory requirements in 130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and 160.5 and 160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per 141.0(a) or 141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per 180.1(a) or 180.2 (b)4Bvii  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 1 of 4)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

**A. GENERAL INFORMATION**

|                            |         |                                    |                             |
|----------------------------|---------|------------------------------------|-----------------------------|
| 01 Project Location (city) | Ventura | 02 Climate Zone                    | 6                           |
|                            |         | 03 Occupancy Types Within Project: | All Other OccupanciesOffice |

**B. PROJECT SCOPE**  
 This table includes electrical systems that are within the scope of the permit application.

| 01   | 02  | 03                        | 04   | 05  | 06  | 07   |
|--|---|---------------------------|--|---|---|--|
| Electrical Service Designation/Description | Scope of Work <sup>1</sup>                  | Rating <sup>2</sup> (kVA) | Utility Provided Metering System Exception to 130.5(a)1/ 160.6(a)1 | System subject to CA Elec Code Article 517 Exception to 130.5(a)2 and (b) | Demand Response Controls  | Provides power to dwelling units/common living areas only in multifamily occupancy |
| MSB  | Add/Ait to feeders and branch circuits only | 216                       | <input type="checkbox"/>   | <input type="checkbox"/>  | Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections 120.2/ 160.3, 130.1/ 160.5, and 130.3/ 160.5, and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required. | <input type="checkbox"/>   |

<sup>1</sup> FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.  
<sup>2</sup> If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.  
<sup>3</sup> Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.

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STATE OF CALIFORNIA  
**Electrical Power Distribution**  
 CALIFORNIA ENERGY COMMISSION

**CERTIFICATE OF COMPLIANCE** NRCC-ELC-E  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 2 of 4)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

**C. COMPLIANCE RESULTS**  
 Results in this table are automatically calculated from data input and calculations in Tables F through J. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

| 01   | 02  | 03   | 04  | 05  | 06  |   |     |                                    |          |
|--|-----|--|-----|---|-----|---|-----|------------------------------------|----------|
| Service Electrical Metering 130.5(a)/ 160.6(a) (See Table F) | AND | Separation for Monitoring 130.5(b)/ 160.6(b) (See Table G) | AND | Voltage Drop 130.5(c)/ 160.6(c) (See Table H) | AND | Controlled Receptacles 130.5(d)/ 160.6(d) (See Table I) | AND | Electric Ready 160.9 (See Table J) | 06       |
| Yes  | AND | Yes  | AND | Yes   | AND | Yes   | AND | Yes                                | COMPLIES |

**D. EXCEPTIONAL CONDITIONS**  
 This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

**E. ADDITIONAL REMARKS**  
 This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

**F. SERVICE ELECTRICAL METERING**  
 This section does not apply to this project.

**G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING**  
 This section does not apply to this project.

**H. VOLTAGE DROP**  
 This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c)/ 160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)2Piii/ 180.2(b)4Bviii.

| 01   | 02  | 03   | 04   | 05              |
|--|---|--|--|-----------------|
| Electrical Service Designation/Description | Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method | Location of Voltage Drop Calculations <sup>1</sup> | Sheet Number for Voltage Drop Calculations in Construction Documents | Field Inspector |
|  |   |  |  | Pass            |
|  |   |  |  | Fail            |

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STATE OF CALIFORNIA  
**Electrical Power Distribution**  
 CALIFORNIA ENERGY COMMISSION

**CERTIFICATE OF COMPLIANCE** NRCC-ELC-E  
 Project Name: Ventura College Admin BLDG Re-Model Report Page: (Page 3 of 4)  
 Project Address: 4667 Telegraph Road Date Prepared: 6/21/2025

**H. VOLTAGE DROP**

|     |                                     |                           |                          |  |                           |   |                          |                          |
|-----|-------------------------------------|---------------------------|--------------------------|--|---------------------------|---|--------------------------|--------------------------|
| MSB | <input checked="" type="checkbox"/> | Voltage drop less than 5% | <input type="checkbox"/> | Permitted by CA Elec Code (Exception to 130.5(c)) <sup>*</sup> | In construction documents | E-002, ELECTRICAL SINGLE LINE DIAGRAM AND PANEL SCHEDULES | <input type="checkbox"/> | <input type="checkbox"/> |
|-----|-------------------------------------|---------------------------|--------------------------|--|---------------------------|---|--------------------------|--------------------------|

<sup>\*</sup> NOTES: If "Permitted by CA Elec Code" is selected under Compliance Method above, please indicate where the exception applies in the space provided below.  
<sup>1</sup> FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".

**I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES**  
 This section does not apply to this project.

**J. ELECTRIC READY BUILDINGS**  
 This section does not apply to this project.

**K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**  
 Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title

NRCC-ELC-E - Must be submitted for all buildings

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VENTURA COLLEGE ADMIN BLDG ALTERATION  
 4667 TELEGRAPH RD., VENTURA, CA, 93003  
 POWER DISTRIBUTION TITLE 24 COMPLIANCE DOCUMENTATION

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PROJECT MANAGER: J.M.  
 DRAWN BY: J.M. CHECKED BY: J.M.  
 DATE: 06/22/2025  
 PROJECT NUMBER: 3425-01-ED24  
 SHEET: E-502